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ABSTRACT

This guide is published by the National Energy Information Center (NEIC), a service of the Energy Information Administration (EIA), with the goal of providing students, educators, and other information users a list of generally available free or low-cost energy-related educational materials. Each entry includes the address, telephone number, and description of the organization and the energy-related materials available. Many of the entries also include Internet (Web) and electronic mail (e-mail) addresses. (JRH)

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ED 406 194

ENERGY

EDUCATION RESOURCES

Kindergarten through 12th Grade

Energy Information Administration
National Energy Information Center
U.S. Department of Energy
Washington, DC 20585

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
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March 1997

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PREFACE

Energy Education Resources: Kindergarten Through 12th Grade is published by the National Energy Information Center (NEIC), a service of the Energy Information Administration (EIA), to provide students, educators, and other information users, a list of generally available free or low-cost energy-related educational materials.

Each entry includes the address, telephone number, and description of the organization and the energy-related materials available. Many of the entries also include Internet (Web) and electronic mail (E-Mail) addresses. Each entry is followed by a number, which is referenced in the subject index in the back of this book.

Some of the organizations represented in this list take policy positions on certain energy issues and express them even in educational materials. Because EIA is the independent statistical and analytical agency within the U.S. Department of Energy (DOE), it does not advocate any policy position of DOE or any other organization. EIA has completed this list solely to aid educators and students in locating materials.

Paula Altman of NEIC, updates and compiles *Energy Education Resources* once a year. To include a new entry or to obtain a free copy of this list, contact NEIC at the following address:

National Energy Information Center, EI-30
Energy Information Administration
Room 1F-048, Forrestal Building
1000 Independence Avenue, S.W.
Washington, DC 20585
(202) 586-8800
TTY: For people who are deaf or hard
of hearing: (202) 586-1181
9 a.m. to 5 p.m., eastern time, M-F

This publication is available on EIA's World Wide Web site: http://www.eia.doe.gov.

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Air & Waste Management Association (A&WMA)
One Gateway Center, Third Floor
Pittsburgh, PA 15222
(412) 232-3444
Fax: (412) 232-3450
E-Mail: info@awma.org
Web: http://www.awma.org

Provides educational materials for students in kindergarten through grade 12. Materials are designed to improve the environmental literacy of students and educators and introduce them to actions that they can take to reduce waste, conserve energy, and develop pollution prevention plans. Materials include fact sheets and information books on such topics as air pollution, pollution prevention, recycling, hazardous waste, landfills, and others. A&WMA also produces *Environmental Resource Guides (ERG's)* on air quality and nonpoint source pollution prevention, which focuses on water quality and runoffs. The *ERG's* are supplementary curricula with a hands-on, interdisciplinary approach to environmental education. We encourage A&WMA members and other interested parties to sponsor local teacher-training workshops. The workshops provide teachers an opportunity to participate in ERG activities and create an ongoing dialogue between environmental professionals and the educational community. Contact A&WMA headquarters to find out about teacher-training opportunities in your area or to order public education materials. 1

Founded in 1907, A&WMA is a nonprofit, technical, and educational organization with over 16,000 members in 65 countries. This worldwide network represents many disciplines: physical and social sciences, health, engineering, law and management. It serves its members and the public by promoting environmental responsibility; provides technical and managerial leadership in the areas of air pollution control, environmental management, and waste processing and control.

The Alliance to Save Energy
1200 18th Street, N.W., Suite 900
Washington, DC 20036
(202) 857-0666
1-(800) 376-6216
Fax: (202) 331-9588
E-Mail: info@ase.org
Web: http://www.ase.org

A nonprofit coalition of business, government, environmental, and consumer leaders.

Consumers who call the toll-free number receive a poster with energy-saving tips and the opportunity for a free informational kit with information from DOE, the Environmental Protection Agency, product manufacturers, and other organizations. 2

The Aluminum Association, Inc.
900 19th Street, N.W.
Washington, DC 20006-2168
(202) 862-5100
Fax: (202) 862-5164
Web: http://www.aluminum.org

A trade association representing the U.S. aluminum industry. Serves as principal source of information on aluminum and the industry.

Provides educational materials on recycling for use in kindergarten through grade 12. There are two educational videos available—"Call Me Can" and "Aluminum Recycling: Your Next Assignment." The videos can be borrowed on a free-loan basis by calling Modern Talking Picture Service (1-800-243-6877). Free catalogs are also available. 3

American Association for Vocational Instructional Materials
220 Smithonia Road
Winterville, GA 30683
(706) 742-5355
Fax: (706) 742-7005

A nonprofit developer, publisher, and distributor of materials for vocational education.

Provides vocational instructional materials on electricity and electrical energy. Included are publications, computer software, and videos for reasonable fees. A free catalog is also available upon request. Publications

available include *Understanding Electricity and Electrical Terms; Electrical Wiring; How Electric Motors Start and Run; Fuels and Lubricants; Electric Motors; Home Electrical Repair;* and *Electrical Controls.* 4

American Chemical Society
1155 16th Street, N.W.
Washington, DC 20036
(202) 872-4590
Fax: (202) 833-7732
E-Mail: education@acs.org
Web: http://www.chemcenter.org

The world's largest scientific society, with a membership of nearly 150,000 chemists and chemical engineers.

Publishes educational materials for use in grades 4 through 12. *WonderScience* is an exciting monthly hands-on science activities magazine for middle school students (back issues are available); *ChemMatters,* an award-winning magazine for high school students, relates chemistry to everyday life (published quarterly, back issues are available); and *ChemCom,* also for high school students, is a chemistry textbook that combines an emphasis on the role of chemistry in everyone's life with basic chemical knowledge. All three products deal with such energy-related topics as electricity, recycling, nuclear energy, and the environment. A free *Teaching Resources Catalog* is available upon request. 5

American Coal Foundation
1130 17th Street, N.W., Suite 220
Washington, DC 20036-4604
(202) 466-8630
Fax: (202) 466-8632

A nonprofit educational organization supported by a coalition of coal producers, electric utilities, railroads, equipment suppliers, sellers, and the labor union.

Provides materials on coal production, distribution, usage, research, and the environment. Some of the materials are available in classroom sets free of charge. Also available free of charge is a coal kit containing samples of peat, lignite, bituminous coal, and anthracite, and a brief description of the formation and different types of coal. 6

American Council for an Energy-Efficient Economy (ACEEE)
1001 Connecticut Avenue, N.W., #801
Washington, DC 20036
(202) 429-8873
Fax: (202) 429-2248
E-Mail: aceee@ix.netcom.com
Web: http://crest.org.aceee

An independent, nonprofit organization dedicated to advancing energy efficiency as a means of promoting both environmental protection and economic prosperity.

Publishes a variety of books, reports, consumer guides, and fact sheets. Material covers energy use, efficiency, and related environmental issues in buildings, industry, and transportation. ACEEE's books and reports are written primarily for adults and concern energy-efficient technologies and policies. In addition, the *Consumer Guide to Home Energy Savings* is a popular illustrated handbook for consumers, and is a suitable teaching resource for grades 8 through 12. These materials are available for a fee and are described in a free catalog. ACEEE also provides fact sheets, free of charge, on energy efficient appliances, energy and the environment, and guidelines for home energy conservation. 7

American Forest Foundation
Project Learning Tree
1111 19th Street, N.W., Suite 780
Washington, DC 20036
(202) 463-2462
Fax: (202) 463-2461

Develops, funds, and administers programs that encourage the long-term stewardship of our natural resources. The Foundation's core programs are Project Learning Tree (PLT) and American Tree Farm System.

PLT is co-sponsored by the American Forest Foundation and the Council for Environmental Education. PLT's newly revised curriculum guide, *Project Learning Tree: Environmental Education Pre-kindergarten through Grade 8 Activity Guide*, focuses on the total environment: land, air, and water. It is local, national, and global in scope. The new curriculum underscores PLT's primary goal -- to help children learn how to think about the environment, not what to think about the environment.The curriculum remains

easily adaptable to many settings from the classroom to youth organizations, museums, nature centers, and scout troops. Nearly 100 activities are offered in a storyline technique covering the themes of diversity, interrelationships, systems, structure and scale, and patterns of change. Central to the new curriculum is an emphasis on constructivist learning theory and whole language teaching strategies. Background information, authentic assessment opportunities, an extensive bibliography, and a cross reference index are also included. A new curriculum made up of individual thematic modules, for use in grades 9 through 12, is near completion. PLT curricular materials are available only through workshops. Contact PLT for the name of the program coordinator in your State. ■

American Geological Institute
4220 King Street
Alexandria, VA 22302-1502
(703) 379-2480
Fax: (703) 379-7563
E-Mail: ehr@agiweb.org
Web: http://www.agiweb.org/

Established in 1948, the American Geological Institute (AGI) is a nonprofit federation of 30 member organizations representing more than 80,000 geologists, geophysicists, and other earth scientists.

Distributes information on earth science education through several mechanisms, including publications (textbooks, monographs, a monthly magazine entitled *Geotimes*, brochures), public inquiries, outreach programs (workshops and presentations), compact discs and a laser disc. *Careers in the Geosciences* (1-10 copies free) is one of the publications available. Compiled and distributed since 1990, the *Earth Science Education Resource Directory* provides information on earth science educational materials that are available from nonprofit organizations. The list is updated annually and is available in hard copy and through electronic mail at the address above. AGI's goals are to advance and promote the geosciences through improved public information,

expanded professional services to the geoscience community, and increased earth science educational programs at the college and precollege levels. For additional information, write to AGI Publications Center, P.O. Box 205, Annapolis Junction, MD 20701, (301) 953-1744 or fax at (301) 953-2838. 9

American Nuclear Society
Outreach Department
555 North Kensington Avenue
LaGrange Park, IL 60525
(708) 579-8251
Fax: (708) 352-0499
E-Mail: outreach@ans.org
Web: http://www.ans.org

A nonprofit scientific and educational organization of professionals in the field of nuclear science and technology.

Offers free publications (single copies) on nuclear energy and uses of the atom. Available materials include *Nuclear Energy Facts Q&A*, *Nuclear Technology Creates Careers*, *Personal Radiation Dose Chart*, and a simulated nuclear fuel pellet. Science and social studies curricula materials for use in kindergarten through grade 12 may be borrowed or purchased. A free catalog is available upon request by mail or electronic mail at outreach@ans.org. Teachers may sign up for the free newsletter *re-actions*, which contains articles on uses of the atom in everyday life and--in each issue--an "activity card" with a project for classroom use. Shorter workshops and sessions are held throughout the year at exhibits, conferences, in-service training, and by invitation. 10

American Petroleum Institute
Public Relations Department
1220 L Street, N.W.
Washington, DC 20005
(202) 682-8118
Web: http://www.api.org

A national trade association that encompasses all branches of the petroleum industry.

Supplies educational materials on the petroleum industry to teachers at no charge. Available materials include a video for middle school students that illustrates with pop music and dance the often invisible role that petroleum products play in our lives. Entitled "Fuel-Less, You Can't Be Cool Without Fuel," is also being distributed by the National Science Teachers Association. One per classroom. *The Ecosystem of Oil* explains the role of petroleum throughout history, emphasizing the petroleum industry's commitment in safeguarding environmental and wildlife resources. Classroom sets of up to 35 are available. *Running on Oil* is a booklet which includes an eight-page feature article on oil; a large colorful poster for classroom display; and classroom activities demonstrating the scientific properties and role of oil in modern life. One per classroom. Also available in classroom sets of up to 35 is an oil barrel-shaped card entitled Facts About Oil, which contains oil industry facts including the number of people who work in the industry, used motor oil collection, gasoline taxes paid, and petroleum products and petrochemicals made from a barrel of crude oil. **11**

American Plastics Council
1801 K Street, N.W., Suite 701L
Washington, DC 20006
(202) 974-5379
1-(800) 2-HELP-90
Fax: (202) 296-7119
Web: http://www.plasticsresource.com

The American Plastics Council (APC) is the major national trade association representing the U.S. plastics industry on resource conservation issues. APC works on behalf of the overall plastics industry to enhance the integrity of plastics, focusing on resource management-related environmental issues. Its mission is to ensure that plastics are a preferred material in a more environmentally conscious world.

APC, in conjunction with the National Middle Level Science Teachers Association, has created a unique hands-on kit, designed to help middle level science classes explore the world of plastics. Included in "Hands On Plastics: A Scientific Investigation Kit" are written background information, recycled plastic resin samples, and learning cycle lesson plans to teach your class about chemical structures, identification codes, and recycling. The kit is available for a nominal fee. Additional educational materials include *Plastics in Perspective*, a booklet that answers the most frequently asked questions about plastics in the environment, and an 11-minute video entitled "The Busy, Busy Planet." The video addresses issues such as source reduction, energy efficiency and recycling, and illustrates the many ways plastics benefit our lives and our environment. Single copies of each of these materials are free to educators, and can be obtained by calling the hotline or through the Web site above. **12**

American Public Power Association
2301 M Street, N.W., Suite 300
Washington, DC 20037
(202) 467-2900

A service organization for not-for-profit community-owned electric utilities

Provides various pamphlets, including *The Benefits of Public Power; Profile of Power; Careers in Public Power;* and *All About Electricity and 10 Ways Kids Can Save It.* Offers a *Teaching Unit on Electromagnetic Waves*, which was developed by the Los Angeles Department of Water and Power for junior high and senior high school students. Also available are

two videos, "Simple Things You Can Do to Save Energy" and "How to Make Great Videos About Saving Energy." The videos were prepared by the Burlington (Vermont) Electric Department through the American Public Power Association's DEED (Demonstration of Energy Efficient Developments) program. Publications and videos are offered for a nominal fee. A free catalog is available. **13**

American Solar Energy Society
2400 Central Avenue, Suite G-1
Boulder, CO 80301
(303) 443-3130
Fax: (303) 443-3212
E-Mail: ases@ases.org
Web: http://www.ases.org/solar

A national membership association dedicated to advancing the use of solar energy.

Offers sample copies of its magazine *Solar Today* and publication catalog. Has one science project book, *Elementary and Secondary Science Projects in Renewable Energy and Energy Efficiency*, available for a fee. **14**

American Water Works Association
6666 West Quincy Avenue
Denver, CO 80235
(303) 794-7711
(303) 347-6140 (Youth Education)
Fax: (303) 794-7310
E-Mail: bmuslim@awwa.org
Web: http://www.awwa.org

An international, nonprofit, scientific, and educational organization of professionals associated with the public drinking water industry, including utilities, manufacturers, consultants, researchers, and educators.

Provides educational materials designed to teach young people about water treatment, distribution, and conservation. Materials include activity books, teacher's guides, comic style books, computer software, videos, bookcovers, and novelty items. A free Youth Education Sample Packet and other educational materials may be ordered

directly from AWWA headquarters in Denver. The packet includes an AWWA Youth Education Catalog. To place orders, telephone the AWWA Bookstore at 1-800-926-7337 or access it on the Web site above. 15

American Wind Energy Association
122 C Street, N.W., Fourth Floor
Washington, DC 20001
(202) 383-2500
Fax: (202) 383-2505
E-Mail: windmail@mcimail.com
Web: http://www.igc.apc.org/awea/

The American Wind Energy Association (AWEA) represents wind energy as a technology that is economically and technically viable today.

Offers an Educator's Packet on wind energy including: the current *Wind Energy Status Report*, which outlines the domestic and international growth of the wind industry; the *Basic Facts About Wind Energy*, which discusses the scale of wind projects as well as economic development; and a *Wind Energy Information Guide*, a compilation of further sources to contact for information about wind energy. Elementary (grades 4 through 8) and secondary (grades 7 through 12) fact sheets and a simple experiment are also provided for use in the classroom. This packet is available free upon request. Other educational materials like videos and posters are available for a fee through the AWEA publications catalog. 16

Apple Computer, Inc.
1 Infinite Loop
Cupertino, CA 95014
1-(800) 800-2775
E-Mail: ewhite@apple.com
Web: http://www.apple.com

Apple develops, manufactures, and markets personal computers for use in education, business, science, engineering, and government.

The mission of the Education Division of Apple Computer is to provide advanced technology for learning "anytime, anyplace, and anywhere" for students and educators. The Macintosh computer systems are specifically designed with input from educators and continue to be the computer of choice of most schools. In 1996, Apple continued this tradition with the introduction of the eMate 300, which is a low cost, portable data collection device.

During 1997 Apple will introduce a collection of software solutions that will allow teachers and students to conduct investigations into environmental issues, analyze their findings, and publish the results using either a word processor or a web page builder. These solutions will be part of the Apple Education Series (AES), a suite of hardware and software products that include CD's, writing and publishing tools, productivity tools, and curriculum simulations. Apple has also produced a set of science handbooks that are distributed by the National Science Teachers Association at 1-800-722-NSTA. Information about any Apple product is available on the Internet or by calling the above number. 17

Arizona Department of Commerce
Energy Office
3800 N. Central, Suite 1200
Phoenix, AZ 85012
(602) 280-1402
Fax: (602) 280-1445
E-Mail: jima@ep.state.az.us
E-Mail: Cheryll@ep.state.az.us

A DOE-funded program that emphasizes an energy efficiency curriculum for students in kindergarten through grade 12.

Provides the following materials and services for primary and secondary schools: *Bright Ideas* (single-topic publications covering energy and the environment, recycling, solar cooking, and photovoltaics); *Energy Patrol: Turn Off Those Lights* and *Marketing Energy Patrol.* 18

The Aseptic Packaging Council
P.O. Box 3794
Washington, DC 20007
1-(800) 277-8088

A trade association representing the U.S. manufacturers of drink boxes. The APC's primary mission is to inform the American public about the product benefits and environmental attributes of aseptic packaging.

Offers free educational materials on recycling issues for teachers and students. *Waste Wise: Concepts in Waste Management*, a teacher's discussion guide, can be adapted for particular classes from kindergarten through grade 12. We also have available a poster, What's New In Recycling, which complements the teaching guide. A general information brochure may also be ordered. 19

The Bakken Library and Museum
3537 Zenith Avenue South
Minneapolis, MN 55416
(612) 927-6508
Fax: (612) 927-7265
Web: http://www.bakkenmuseum.org

A nonprofit educational organization with library and museum collections documenting the history of electromagnetism and its uses in the life sciences.

The Bakken has developed a book and kit to teach students how scientists of the 18th century succeeded in developing the basis for all we know about electrostatics, equipped only with their

powers of observation and simple apparatus. The kit has easy-to-assemble apparatus commonly found in an 18th-century electrical laboratory, a 22-minute videotape, and a 100-page curriculum manual. The manual has instructions for demonstrations and experiments, methods for adapting the experiments for students from the elementary grades through high school, and gives the historical context in which key discoveries were made. Designed and tested by The Bakken Library and Museum, this kit offers an excellent introduction to teaching basic electricity and the history of science.

By using this inquiry-based approach, students gain deeper insight into the principles of electrostatics. The development of the kit was cofunded by the National Science Foundation. This kit is available for sale from The Bakken. The video and curriculum manual are available separately. Write or fax to obtain The Bakken's current list of other educational resources for sale or to receive our free newsletters. **20**

Baltimore Gas and Electric Company (BGE)
Educational Services
P.O. Box 1475
Baltimore, MD 21203-1475
(410) 234-7484
Fax: (410) 234-7471

An investor-owned utility serving Baltimore City and all, or parts of, nine central Maryland counties.

Provides educational services free of charge to schools in BGE's service area. Services include classroom programs, career programs, resources, certified workshops for educators; and videos, power plant tours, and classroom literature for students in kindergarten through grade 12. A free *Educational Resources* catalog is available upon request. **21**

BP America
Corporate Communications
200 Public Square (10-L)
Cleveland, OH 44114-2375
(216) 586-3794
Fax: (216) 586-6957
E-Mail: kochtj@regctr02.usaclv.msnet.bp.com

The wholly owned U.S. subsidiary of one of the world's largest international petroleum and petrochemical groups.

Science Across America makes it possible for students to exchange their scientific work with others throughout the United States and around the world. The program includes eight teaching modules designed for students in grades 7 through 12. The units deal with those issues which are of international environmental interest (e.g., energy and drinking water quality) and are common to science courses internationally. There is a fee, which includes lifetime registration on a worldwide database of participating schools. For more information, write to the address above. *BP Statistical Review of World Energy*, a booklet containing information on world energy supplies and demand, includes data on oil, gas, coal, nuclear, and hydro in terms of reserves, production, and consumption for a 10-year period before the current year. Also available is *Facts*, BP's annual report on health, safety and the environment. These publications are free to teachers. Contact above address. Also available is the *BP Educational Resources Catalogue*, which offers a full range of school resource materials. Some of the items in the catalogue are available for a fee. 22

Bronx Zoo/Wildlife Conservation Park
Education Department
2300 Southern Boulevard
Bronx, NY 10460
1-(800) 937-5131
Fax: (718) 733-4460
Web: http://www.wcs.org

Offers Voyage From the Sun, a 20-lesson classroom science module for grades 4 through 9. Developed with funding from the U.S. Department of Energy, Voyage is designed to introduce students to the major way in which energy is important to wildlife and natural habitats. It encourages students to explore the story of Earth's energy--its solar origins, how it is incorporated into living systems through photosynthesis, and how it flows from plants to animals.

During Voyage training workshops, teachers learn strategies for making the study of energy fun and exciting. Teachers receive first-hand training in how to guide their students as the 4-foot-high Energy Pyramid becomes a classroom exhibit on energy. Through activities such as Photosynthesis Scramble and Conserving Energy: Tundra Math, teachers build the confidence to lead students on a voyage of discovery as they explore how energy is central to biology and how it links the natural and physical sciences. For more information, call the Manager of National Programs at the number above.
23

The purpose of the Wildlife Conservation Society, since its founding in 1895 as the New York Zoological Society, has been to save wildlife and inspire people to care about our natural heritage. The Society continues to pioneer environmental education programs throughout the U.S. and abroad. It is the world's leading international conservation program devoted to saving endangered species and ecosystems.

Bullfrog Films
P.O. Box 149
Oley, PA 19547
1-(800) 543-3764
Fax: (610) 370-1978
E-Mail: bullfrog@igc.org
Web: http://www.bullfrogfilms.com

An educational film distributor that offers the largest collection of energy films and videos in the country.

Provides educational films and videos on energy and energy-related issues. Titles include *Bill Loosely's Heat Pump; Decision: Energy for the Future; The Energy Bank; Energy Efficiency; Energy, Technology and Society; Harness the Wind; Living Under the Cloud: Chernobyl Today; Race for the Future; Solar Promise; Go; An Energy-Efficient Doghouse; Solar Energy Doghouse; City Lights; Rethink-Pollution Prevention Pays;* and *Wake Up Freddy,* in the tradition of Bullfrog's classic *Toast.* Programs are available for purchase or rental. Special packages, with discounted prices, can be created to serve most schools' needs. A free catalog is available upon request. **24**

California Energy Commission
1516 9th Street, MS-31
Sacramento, CA 95814
(916) 654-4982
Fax: (916) 654-4420
E-Mail: gwenwa@energy.ca.gov
Web: http://www.energy.ca.gov/education

The California Energy Commission is the State's principal energy planning organization, promoting a balanced and competitive energy system through its diverse programs.

Provides the following environmental education materials for a small fee for kindergarten through grade 12: *Compendium for Energy Resources; Compendium for Human Communities; Universal House, Energy, Shelter & The California Indian; 4-H Home Conservation Guide; Conserve & Renew; Energy Tech-Knowledgy; Let's Get Energized; Turn Out Those Lights--Energy Patrol; Bright Ideas;* and *Energy Quest.* Visit the Nation's first Internet site dedicated solely to energy education. Features word games,

puzzles, energy-related math and science experiments, and information on conservation, energy safety and alternative energy sources; the colorful new site on the World Wide Web is geared to students, parents, and teachers. 25

California Foundation for Agriculture in the Classroom
1601 Exposition Boulevard, FB 16
Sacramento, CA 95815
(916) 924-4380
Fax: (916) 923-5318
E-Mail: cfaitc@cfbf.com
Web: http://www.cfaitc.org

A nonprofit educational foundation that provides educational resources and training for teachers to use agriculture as an integration theme throughout kindergarten through grade 12 curricula.

Teachers may request free or low-cost items including lesson plans, comprehensive classroom units, videos, a resource guide, and the *Cream of the Crop* newsletter. Most programs are specific to California but a limited number of resources may be available for use in other States. Among lesson plans available, some have Spanish language worksheets. All lesson plans are correlated with California curriculum frameworks and undergo extensive field testing and teacher and technical review.

The Foundation encourages classroom integration of agriculture to increase understanding of its vital role in our lives. Agriculture provides a theme which encourages hands-on activities to reinforce concepts in science/environment, mathematics, English/language arts, history/social science, health/nutrition, physical education and the visual and performing arts. Contact with the Foundation is a good starting point for teaching other agriculture-related groups that produce educational resources. Educational materials developed by industries and organizations related to agriculture are reviewed by the Foundation and listed in an annually updated Teacher Resource Guide. 26

The Center for Energy and Economic Development (CEED)
1800 Diagonal Road, Suite 370
Alexandria, VA 22314
(703) 684-6292
Fax: (703) 684-6297
Web: http://www.conx.com/ceed

A nonprofit organization dedicated to preserving coal's role as an economical, efficient, and environmentally compatible source of electricity.

Offers *America's Fuel*, a booklet describing how coal is mined and sent to the marketplace and coal's role in supplying America with electricity, environmental compatibility, new technologies, and economic growth. A video, also called "America's Fuel," is available as well. Also available is a CEED "Pocket Piece" folder which gives facts about coal on such topics as coal technology, coal transportation, health and safety, coal and the environment, coal and the economy, and electricity. Teachers may also request CEED's Coal Technology poster, which describes the process of coal extraction and creating electricity, and "Coal Country," an entertaining educational software program to teach students about coal formation, deposit locations, mining techniques, and common uses of coal in everyday life. All are free of charge. CEED also has an extensive Home Page on the Internet. 27

Center for Renewable Energy and Sustainable Technology (CREST)
1200 18th Street, N.W., 9th Floor
Washington, DC 20036
(202) 530-2202
Fax: (202) 887-0497
E-Mail: orders@crest.org
Web: http://www.crest.org/

The Center for Renewable Energy and Sustainable Technology (CREST), a nonprofit organization dedicated to promoting renewable energy and sustainable development using advanced communications and computer technology.

CREST operates an on-line clearinghouse of renewable energy and energy efficiency information called SOLSTICE, which provides free electronic access to documents, images, directories, and other databases around the world. SOLSTICE can be accessed via Gopher 27

("gopher.crest.org"), File Transfer Protocol (ftp to "solstice.crest.org"), and the World Wide Web ("http://solstice.crest.org/"). CREST has published multimedia educational CD-ROM's about renewable energy, efficiency, and global climate change; the *Sun's Joules* multimedia encyclopedia on renewable energy; School Energy Doctor Auditing software; the Greening of the White House CD-ROM; Spanish-English CD-ROM on Renewable Energy in Latin America; and a renewable energy demonstration module. CREST provides a free quarterly electronic newsletter, *Resource*, which details renewable energy activities. Available on-line and by mail. **28**

Channing L. Bete Publishing Co., Inc.
200 State Road
South Deerfield, MA 01373-0200
1-(800) 628-7733
Fax: (413) 665-2671

Offers *My Book* series, designed for students in kindergarten and grade 1; *Coloring and Activities Books* for students in grades 1 through 3; and *Information and Activities Books* for students in grades 4 through 6. "Experiment Kits" on Magnetism, Conservation, Energy, and Electricity, all for students in grades 4 through 6, are available. Each kit contains 35 student workbooks and one instructor's guide. Energy and Environmental posters for classroom and public display are also available. Also offers a 6th grade curriculum entitled Water Week, which includes hydropower information. Contact your local utility for availability or call the above number. Also provides educational services fulfillment for utilities. **29**

A publishing firm specializing in Scriptographic Booklets. Most utilities provide them to schools in their service territories free of charge; however, the booklets are available from the publisher for a fee.

Charles Edison Fund
101 South Harrison Street
East Orange, NJ 07018
(201) 675-9000
Fax: (201) 675-3345

A charitable foundation providing science teachers with simple, basic, proven fun experimental booklets containing 73 experiments.

Provides "The Best of Edison Science Teaching Kits," which are available to teachers. Each kit contains nine how-to booklets based on experiments of Thomas Edison and other scientists. These are suitable for grades 4 through 8. Titles include: *Energy for the Future; Useful Science Projects; Environmental Experiments; Selected Experiments and Projects; Nuclear Experiments; Energy Conservation; Alternative Energy Sources; Static Electricity – It's a Snap;* and *Lewis Howard Latimer Experiments*. There is a small fee for handling charges. Write for coupon to receive this kit. 30

The Chlorine Chemistry Council (CCC)
1300 Wilson Boulevard
Arlington, VA 22209
(202) 452-9493
Fax: (202) 296-7285
E-Mail: info@C3.org
Web: http://C3.org

The Chlorine Chemistry Council is part of the Chemical Manufacturers Association established to provide information to the public regarding chlorine and to promote the practice and understanding of responsible use for chlorine chemistry.

Making the connection between the periodic table and real life can be challenging, particularly for middle school teachers. CCC offers hands-on materials designed to introduce basic chemistry and the periodic table. By taking a look at one element—chlorine—teachers can help students understand the link between chemical "building blocks" and daily life. The video, handouts, experiments, and lesson guides in the Building Block Chemistry Program were developed by teachers for teachers to help students explore their world. For **FREE** classroom materials and video, write to the address above. 31

City Public Service (CPS)
Consumer Services Section
P.O. Box 1771
San Antonio, TX 78296-1771
(210) 978-2862
Fax: (210) 978-4327
Web: http://www.ci.sat.tx.us/cps

A municipally owned natural gas and electric utility serving substantially all of Bexar County and small portions of seven adjacent counties.

Provides safety and energy educational services free of charge to schools in the CPS service area. Services include classroom presentations, a videotape library, curriculum supplements, and power plant tours. A free *CPS School Energy Education Program Catalog* is available upon request. 32

City Utilities of Springfield
301 E. Central
P.O. Box 551
Springfield, MO 65801-0551
(417) 831-8311
Fax: (417) 831-8808
E-Mail: edecamp@mail.orion.org

A municipal utility serving the metropolitan area of Springfield with electricity, natural gas, and water.

Provides educational services free to instructors in areas served by City Utilities. Offers tours to power plants and water treatment plants, classroom presentations, speakers' bureau, and purchased curriculum materials for students in kindergarten through grade 12. City Utilities also has special units, "The Planet Water" and "Are You Being Safety Conscious Around Electricity." Single copies are available to teachers outside City Utilities' service area. 33

Cobblestone Publishing
7 School Street
Peterborough, NH 03458
1-(800) 821-0115
Fax: (603) 924-7380
E-Mail: custsvc@cobblestone.mv.com
Web: http://www.cobblestonepub.com

A publishing firm specializing in magazines for children and teaching resources.

Publishes educational materials for students in grades 5 through 8. Energy-related titles are: *Energy: Powering Our Nation; Recycling; Earth: A Global Spaceship; Planet Earth: Home Sweet Home;* and a theme pack with activities, ENVIRONMENT. Materials may be purchased from the publisher. Free catalogs are available upon request. **34**

Colorado School of Mines
Teacher Enhancement Program
Office of Special Programs
and Continuing Education
Golden, CO 80401
1-(800) 446-9488 x 3303
Fax: (303) 273-3314
Web: http://www.mines.edu/Outreach/Cont_Ed/teacher.shtml

A State college of science and engineering teacher enhancement program offering coursework and resources for primary school and secondary school educators in science, energy, math, technology, and the environment.

Three times a year, provides a free catalog of course listings specifically for teachers. Courses carry graduate-level recertification credit and offer content-based instruction; practical hands-on experience; and, in some cases, extensive field trips. Offers for a nominal fee *What's Under Your Feet*, an earth science activity book for students in kindergarten through grade 6; *Sharing Science with Children*, a survival guide for visiting scientists and engineers in the classroom; and *Sharing Science: Linking Students with Scientists and Engineers*, a survival guide for teachers. **35**

The Consumer Aerosol Products Council
1201 Connecticut Ave., N.W., Suite 300
Washington, DC 20036
(202) 833-9471

Supported by companies that manufacture and market aerosol products, the Consumer Aerosol Products Council (CAPCO) was formed to provide information on aerosols and environmental issues for consumers, media, and educators at all levels.

Offers "Another Awesome Aerosol Adventure" educational unit for students in grades 4 through 8. Included is an 11-minute video produced by the makers of the children's television program "Beakman's World." Designed with humor in mind, the video, along with accompanying teacher and student guides and take-apart aerosol can, makes the complex issues of aerosol technology, ozone depletion, and environmental awareness memorable and fun for a middle school-age audience. "Another Awesome Aerosol Adventure" is available through Modern Talking Pictures. To order, call Modern's toll free number 1-(800) 243-6877 and ask for digest #K-0190-A. 36

Culver Company
316 Merrimac Street
Newburyport, MA 01950
1-(800) 4-CULVER
Fax: (508) 463-1715
Web: http://www.culverco.com

A developer and publisher of educational materials about energy and related topics.

Produces booklets, videos, posters, and program enhancement items for children and adults. Teacher discussion guides are also available. Utilities purchase and distribute these materials in their service areas; other organizations may purchase them directly. 37

Dayton Power & Light Company
School Programs
1065 Woodman Drive
Dayton, OH 45432
(937) 259-7251
Fax: (937) 259-7813

An investor-owned electric, steam and natural gas utility that serves 464,000 customers in 24 counties of a 6,000-square-mile area in west central Ohio.

Provides free educational programs and resources for students in kindergarten through grade 12 to schools within the utility's service area. Programs include a customized computer software program on energy conservation; an electric and natural gas safety program; an energy conservation program in which Boy Scouts and Girl Scouts can earn an energy awareness patch; science fair kits for teachers and a recognition event for top science fair projects; workshops to provide educators with energy-related information and resources; power plant and energy museum tours; and classroom presentations. Materials provided include booklets, videos, posters, student handbooks, and teacher's guides with classroom activities. 38

Denver Earth Science Project
Office of Special Programs & Continuing Education
Colorado School of Mines
Golden, CO 80401
1-(800) 446-9488 x3038
Fax: (303) 273-3314
E-Mail: jproud@mines.edu
Web: http:www.mines.edu/Outreach/Cont_Ed/desp.shtml

A teacher enhancement program, in partnership with corporations, Federal agencies, school districts, and professional organizations, which provides innovative earth science curriculum materials for use in kindergarten through grade 12 and teacher training.

Provides, for a fee, a series of educational workshops that address a range of earth science topics developed by trained curriculum development teams. The team members are experienced earth science teachers and practicing scientists. The hands-on student activities included in each module incorporate real data and

follow a problem-solving approach. Each module integrates mathematics, geography, economics, and social and environmental issues with basic earth science concepts. The modules are:

- "Oil and Gas Exploration" (grades 7-12)
- "Ground Water Studies" (grades 7-9)
- "Paleontology and Dinosaurs" (grades 7-9)
- "Energy--A Closer Look at Oil and Gas" (grades 4-6).

Each module contains a teacher resource kit which includes a teacher/student notebook, maps, audio-visual materials, posters, oil samples, groundwater models, etc. Call to find out the location of the nearest training site. 39

Disney Educational Productions
105 Terry Drive, Suite 120
Newtown, PA 18940
1-(800) 295-5010
Fax: (215) 579-8589

Disney Educational Productions develops and distributes entertaining and thought-provoking videos and interactive laser discs that excite children of all ages to learn about a variety of subjects.

Offers educational videos and videodiscs on energy, the environment, earth science, recycling, and water. Curriculum-oriented videos come with discussion guides and lesson plans. Titles include:

- "Recycle Rex" (starring Disney's hip animated recycling dinosaur)
- "The Energy Savers" (starring Donald Duck, Mickey Mouse and Goofy)
- 10 "Bill Nye the Science Guy" earth science shows
- "Zort Sorts: A Story About Recycling"

- "The Great Search--Man's Need for Power and Energy"
- "Return to Sender: A Story About Littering."

Interactive discs, such as *Recycle Rex* and *Discover Quest: Explorations in Earth Science*, encourage learning with a mix of videos, interviews, games, on-line glossaries, and comprehensive guidebooks. Programs are available for purchase or lease. Call the toll-free number to request a free catalog. 40

DuPont
Corporate Contributions
Nemours Building
N9541
Wilmington, DE 19898

External Affairs of a chemical company.

Offers for a fee an environmental resource kit developed with the National Science Teachers Association (NSTA). Material covers air, land, life, people, planet, and water. The kit, which is targeted for grades 4 through 9, includes color posters, population data charts, and color transparencies. Call 1-(800) 722-NSTA. 41

E2: Environment & Education
P.O. Box 20515
Boulder, CO 80308-3515
(303) 442-3339
Fax: (303) 442-6633
E-Mail: e2ee@enviroaction.org
Web: http://www.enviroaction.org

A nonprofit organization dedicated to helping young people develop an awareness of environmental challenges, and the understanding and skill to take informed and effective action.

Developed Environmental ACTION (Analyze, Consider Options, Take Action, In Our Neighborhoods). This is a relevant, supportive and clearly structured interdisciplinary environmental education curriculum for grades 6 through 12. The program offers separate modules: Energy Conservation, Water Conservation, Waste Reduction,

Chemicals: Choosing Wisely, Food Choices, and Habitats & Diversity. Each module provides instruction on how to investigate environmental issues while creating opportunities to practice action skills. The hands-on activities move students from awareness to choice into action. Students conduct an audit of current resource consumption and research alternative practices, services, and technologies. They conclude with a plan for change based on a cost benefit analysis. By having students use the school community as their laboratory, the school becomes a model of sustainable practices. For a fee, E2 will provide teacher training workshops. **42**

Earth Foundation
5151 Mitchelldale, Suite B-11
Houston, TX 77092
(713) 686-1205
Fax: (713) 686-6561
E-Mail: EarthFound@aol.com
Web: http://www.earthfound.com

An organization dedicated to environmental education and conservation.

Each year thousands of schools participate in the Earth Foundation's Rescue the Rainforest Project. Thus far, the network of 8,000 active environmental teachers and students is responsible for adopting over 90,000 acres of rainforest. A "Rainforest Project Kit" is available to educators. The kit, which includes curriculum, videos, instructions, and a ready-made fundraising project, contains everything a school will need to supplement an ecology unit with a teaching method called "Solution-Based Teaching." Upon completion, participating schools receive a certificate recognizing them for the acres adopted and written updates about the area being preserved. Schools that

adopt five or more acres receive a free follow-up video that shows students live footage of the area. Call 1-(800)-5MONKEY to receive your "Rescue the Rainforest Kit" and for more information about this project or the Coral Reef Rescue Campaign. **43**

East Ohio Gas
Educational Affairs Department
P.O. Box 5759
Cleveland, OH 44101-0759
(216) 736-6218
Fax: (216) 736-5323

A natural gas utility serving over one million customers in a 23-county area throughout northeast and southeast Ohio.

Promotes energy awareness in the community and emphasizes the importance of natural gas. Provides educational resources, free of charge, to primary school and secondary school educators **in the areas served by East Ohio Gas**. A free *Educational Resources & Awards Catalog* offers a variety of programs and materials. Topics include natural gas vehicles, natural gas safety, science fair planning, and parental resources. **44**

Edison Electric Institute (EEI)
Order and Billing
701 Pennsylvania Avenue, N.W.
Washington, DC 20004-2696
1-(800) 334-5453
Fax: 1-(800) 525-5562
Web: http://www.eei.org

An association of share holder-owned electric utilities.

Suggests that you first contact your local electric utility. Many utilities have educational programs about energy and the environment for schools. EEI's publications catalog is free. Other publications are available for a fee. **45**

Edison Plaza Museum
P.O. Box 2951
350 Pine Street
Beaumont, TX 77704
(409) 981-3089
Fax: (409) 981-2106

Established in 1982 by Gulf States Utilities Company as a nonprofit, educational institution to focus on the inventions of Thomas A. Edison and show how the electric industry has expanded on his patents to improve the quality of life.

Contains the largest collection of original Edison artifacts west of the Mississippi River. All eight major fields of Edison's achievement are represented. The museum is housed in the historic Travis Street Substation--the first building to distribute electric power in east Texas. Exhibits include past, present, and future energy technologies. A free guide book, brochure, and children's book are available upon request and can be mailed anywhere. **46**

Educational Development Specialists
5505 E. Carson Street, Suite 250
Lakewood, CA 90713
(310) 420-6814
Fax: (310) 420-1485

Energy and environmental education program developers and distributors.

Offers the Think Earth education program nationwide to sponsors who give the program to schools. This award-winning program interrelates air, land, water, and energy topics into a comprehensive environmental education school pack. It contains units for students in kindergarten through grade 6, plus a fully animated video. A free catalog is available on the program. **47**

Energy Source Education Council
Program Distribution Office
5505 E. Carson Street, Suite 250
Lakewood, CA 90713
(310) 420-6814
Fax: (310) 420-1485

A nonprofit organization involved in developing and distributing quality energy educational programs.

Has an Energy Source Education Program that is financially supported by member organizations (mostly utilities) from the private sector. Material is sold to the utility companies who then distribute it at no charge to classrooms in their service areas. Material to others is available for a fee. A free catalog is available. 48

Enterprise for Education, Inc.
1316 Third Street, Suite 103
Santa Monica, CA 90401
(310) 394-9864
Fax: (310) 394-3539

Offers booklets for primary school and secondary school science classes FREE from most electric utilities.

Publishes *Energy 90s*, the Energy and Environmental *Skill Builder* series, and the *Math at Work* series. Products range from in-depth, semester-long programs to short, one- to five-classroom period lessons on energy and environmental issues. All publications are printed in full color and include up-to-date information and an abundance of science experiments and classroom activities.

The *Skill Builder* series, 8- and 16-page booklets, comprise the following topics:

- Environmental--"Using Our Resources Wisely" (grades 2-4); "The Greenhouse Effect and Global Warming" (grades 6-12); and "Percentages Help an Environmental Engineer" (grades 6-8)

- Conservation--"Efficiency of Electric Appliances" (grades 6-10); "Climate and Comfort" (grades 6-12); and "Is Efficiency the Best Energy Source?" (grades 9-12)

- Nuclear Energy--"Nuclear Reactor" (grades 8-12); "The Atom and Radiation" (grades 6-12); and "Nuclear Fuel Cycle" (grades 8-12)

- Fossil Fuel--"Coal: The Once and Future King?" (grades 6-9); "Natural Gas" (grades 6-12); "Geology of Oil" (grades 6-12); and "Refining Oil" (grades 8-12)

- Electricity--"Mouse House Surprise," a 32-page Teacher BIG book and student little book (grades K-2); "Sam and Jody Save the Circus" (safety) (grades 2 and 3); "Paths for Electricity" (safety) (grades 3-5); "Energy Transformations" (grades 4-9); "Generating Electricity" (grades 5-9); "Sources of Electricity" (grades 5-9); "Demand for Electricity" (grades 6-9); "Working With Energy Graphs" (grades 6-12); "Measuring Helps an Electrician Wire an Apartment" (grades 4-6); "An Electrical Engineer Plans an Electrically Safe Outdoor Concert" (safety) (grades 5-9); "Electricity from Wind, Water & Sunlight" (grades 4-8), which includes a lab activity kit; and "Risk: Taking Chances, Making Choices" (grades 6-10).

When available, the above materials are free of charge from most electric utilities. Contact the education specialist at your local utility. Materials also may be purchased directly from the publisher.

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Environmental Hazards Management Institute (EHMI)
10 Newmarket Road
P.O. Box 932
Durham, NH 03824
(603) 868-1496
Fax: (603) 868-1547
E-Mail: ehmiorg@aol.com

A nonprofit nonpartisan environmental, health, and safety education institute working to promote environmental responsibility in the home, at the workplace, and in the community through education and relationship building.

Offers environmental, health, and safety education and outreach materials on topics such as recycling, energy efficiency/conservation and indoor air quality, household hazardous product management, water quality, and composting. Included are: *EHMI Earth Express®*, a publication for elementary school children designed to increase awareness and understanding of environmental issues; Kids Leading the Way in Energy Conservation™, a color-in poster; the "Automobile Care for the Environment" video kit addressing pollution prevention and automotive product management for high school students; the "Home Environment Wheel™" addresses energy efficiency and indoor air quality at home. There is a fee for all educational materials, but discounts are available for bulk orders. A free catalog is available. **50**

EV Media
612 Colorado Avenue, Suite 111
Santa Monica, CA 90401
(310) 394-3980
Fax: (310) 394-3539

An educational publishing company providing electric vehicle-related materials.

Provides publications and activity kits on electric vehicles (EV) for schools and the general public. Materials range from color booklets for secondary school students to teacher guides, electric vehicle model kits, and discussion leader guides free from many electric utilities with EV programs. Materials cover electric vehicles,

electricity, energy efficiency and conservation. Titles include *Electric Car 1997*, a 16-page color booklet (for grades 7 through 12); the 128-page *Teacher's Electric Car Book*, everything a teacher needs to conduct a unit on electric vehicles; "The Electric Flyer Model Kit," which includes everything needed to build a working, table-top size model electric vehicle; and "The Electric Vehicle Classroom Kit," which includes a classroom set of color booklets; the *Teacher's Electric Car Book*, and five "Electric Flyer Model" kits. The Battery/Charger option for the EV "Classroom Kit" includes 5 rechargeable 1.5 volt AA Ni-cad batteries and a four-unit battery charger. Contact your electric utility electric vehicle department for these materials, which are often offered at no cost to educators. 51

Exxon Company, U.S.A.
Public Affairs
P.O. Box 2180
Houston, TX 77252-2180
(713) 656-8758
Fax: (713) 656-6267
Web: http://www.exxon.com

Oil company department that responds to public inquiries pertaining to energy and environmental issues.

Offers a collection of scientific reports and brochures that document the environmental recovery of Prince William Sound, Alaska, following the 1989 Valdez oil spill. Also available is the 22-minute video, "Scientists and the Alaska Oil Spill;" and the video and lesson plan on artificial reefs, "Aquariums Without Walls;" and a comic book entitled *Mickey & Goofy Explore the Universe of Energy*. The materials are free, but quantities are limited. 52

Flexible Packaging Educational Foundation
1090 Vermont Avenue, N.W., Suite 500
Washington, DC 20005
(202) 842-3839
Fax: (202) 842-3841

A trade association of manufacturers and suppliers of flexible (or nonrigid) packaging, supporting educational efforts on the purpose of packaging and its role in the first "R" of waste management--reduction.

Offers *Less Waste in the First Place: Six Lessons on Packaging, Flexible Packaging and Source Reduction*, a lesson guide on packaging, free to educators. Appropriate for students in grades 4 through 10, the lessons discuss the historic, scientific, social, and environmental considerations involved in the design, development, and disposal of packaging. Included are instructions for a "hands-on" packaging design contest for students and suggestions on how to involve the local community. The lesson plan also features a listing, which can be used as a handout, of other resources and an explanation of common myths surrounding packaging and garbage. 53

Florida Energy Office
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
(904) 488-2475
Fax: (904) 488-7688

The State's point of contact on all energy-related matters, issues, and programs.

Focuses on solar energy and conservation. *Renewable Energy Activities for Middle Grades*, lesson plans for students in grades 6 through 8, is available. *Solar and Energy Conservation Projects for Students* is available to elementary school teachers. Another publication, *Energy Research Projects Guide*, assists students in their selection of energy topics for science fair projects. Single copies are free of charge **to Florida teachers and students.** 54

Florida Power & Light Company
Energy Encounter
P.O. Box 128
Ft. Pierce, FL 34954
(561) 468-4111
Fax: (561) 467-7565
Web: http://www.fpl.com

A regulated investor-owned utility that serves more than 3 million customers in Florida.

Provides limited free energy educational resources within the Florida Power & Light service area. Sponsors an electrical safety poster contest for elementary and middle schools. Offers special environmental education presentations on manatees and sea turtles, and a series of environmental education pamphlets. Operates the Energy Encounter visitors' center at the St. Lucie Nuclear Power Plant on Hutchinson Island. The center is open to the public and offers physical and environmental science presentations to school groups as well as teacher workshops for educators. Presentations meet the science objectives for Florida. Also offers environmental tours of the Barley Barber Swamp and Turtle Beach Nature Trail. 55

Florida Solar Energy Center (FSEC)
1679 Clearlake Road
Cocoa, FL 32922-5703
(407) 638-1000
Fax: (407) 638-1010
Web: http://www.fsec.ucf.edu

The energy institute for the State University System, FSEC's mission is to conduct research on alternative energy technologies, ensure the quality of solar energy equipment, and educate people about their energy options.

Offers free publications on solar water heating, energy-efficient buildings, transportation, and lighting. Provides workshops and information packets to students, teachers, and energy professionals. 56

Foodservice & Packaging Institute, Inc.
1901 North Moore Street, Suite 1111
Arlington, VA 22209
(703) 527-7505
Fax: (703) 527-7512
E-Mail: foodserv@crosslink.net
Web: http://www.fpi.org/fpi

A nonprofit trade association for manufacturers, suppliers, and distributors of foodservice disposable products. These products consist of single-use cups, plates, bowls, bags, cutlery, trays, hinged-lid "clam-shell" containers, and other paper, plastic, and aluminum items. Foodservice & Packaging Institute, Inc. (FPI) supports the environmentally responsible manufacture, distribution, use, and disposal of foodservice disposables.

Now offers three issue sheets--"Environment," "Sanitation," and "Lifestyle"--that explain the importance of foodservice disposable products to today's consumers. These informative single-page sheets are appropriate for middle school and high school students. FPI has just published the *Environmental Stewardship Report*, a detailed guide to the foodservice disposables industry's environmental accomplishments. The report is a useful resource for educators to use for their reference. Individual copies of FPI materials are free of charge to educators. Contact FPI to receive the price for larger quantities. 57

Frey Scientific
A Division of Beckley Cardy
100 Paragon Parkway
Mansfield, OH 44903
1-(800) 225-3739
Fax: (419) 589-1660
Web: http://www.Beckleycardy.com

A full-line supplier of educational materials, equipment, and supplies for science, designed for students from kindergarten through college.

Offers a general science catalog that includes over 75 pages of products for earth science and ecology study. Product line consists of books, charts and posters, videos and video discs, software, kits, games, manipulatives, general supplies and equipment, and more. Products are available for a fee; catalog is free of charge. 58

General Atomics Sciences Education Foundation
General Atomics
3550 General Atomics Court
San Diego, CA 92121-1194
(619) 455-3335
Fax: (619) 455-3379
E-Mail: pat.winter@gat.com
Web: http://www.fusioned@gat.com

A research and development center for high-technology systems.

Offers information to high school and middle school teachers and students regarding current U.S. and worldwide nuclear fusion research that is aimed at understanding fusion science and its role in providing an energy resource for tomorrow's needs. Available materials include a 20-minute video, "Fusion: Creating a Star on Earth" and a high school teachers guide and workbook. A full size color poster is also available. These items are available free, while supplies last. Requests for the teachers guide and poster must be sent on school letterhead. In addition, General Atomics will send out at no charge material explaining the operation and safety of high temperature gas-cooled reactors which are meltdown proof and convert about 50 percent of the fission energy to electricity. When large atoms are fissioned by neutrons, energy is released. Nuclear reactor plants use this energy to make steam or hot gas to drive turbines which drive generators to make electricity. 59

Geothermal Education Office
664 Hilary Drive
Tiburon, CA 94920
(415) 435-4574
1-(800) 866-4436
Fax: (415) 435-7737
E-Mail: mnemzer@aol.com
Web: http://www.ensemble.com/geo

A nonprofit educational organization serving teachers and students nationwide to increase awareness and understanding of geothermal energy.

Provides free booklets, small posters, newsletters, and selected geothermal industry publications (some in class sets). Available for a fee are an

elementary-level video with transcript and glossary; and a 90-page geothermal curriculum for grades 4 through 8. The curriculum, endorsed by the National Science Resources Center, covers the geology, history, and uses of geothermal energy, placed in the context of today's energy needs. Includes copy-ready student information pages; science experiments; math, language, arts, and social studies activities; a glossary; and other suggested resources. 60

Global Issues Resource Center
East I, Cuyahoga Community College
4250 Richmond Road
Cleveland, OH 44122
(216) 987-2224
Fax: (216) 987-2053

A nonprofit library and educational resource, which works in partnership with foundations, Federal agencies, and school districts, that provides innovative programs and teacher training focusing on global issues, energy, environment, and conflict resolution.

For a fee, the Center provides to primary school and secondary school educators a variety of workshops that address a range of topics and emphasize interdisciplinary and hands-on strategies. The *Energy Choices for the Future* unit, supported by a teacher training workshop, is sold to educators for grades 4 through 7. Teacher and student materials include a "Teacher's Guide and Resource Box." Subject-specific bibliographies (energy, environment, conflict resolution, global issues) are available for a nominal fee. 61

GPU Energy
2800 Pottsville Pike
P.O. Box 16640
Reading, PA 19640-0001
(201) 644-4294
Fax: (201) 455-8270
E-Mail: clafevre@GPU
Web: http://www.GPUKIDS.com

Headquartered in Reading, PA, GPU Energy serves 68 counties throughout New Jersey and Pennsylvania. GPU Energy is a subsidiary of GPU, Inc., an investor-owned electric utility based in Parsippany, NJ.

Provides free energy education resources for all grade levels within the GPU Energy service area on the above interactive Web Site, which offers

teacher modules, lesson plans, student activities, games, contest, a teacher chat room, and much more. 62

Hawaiian Electric Company, Inc.
Education & Consumer Affairs Division
900 Richards Street
Honolulu, HI 96813
(808) 543-7511
Fax: (808) 543-7412
Web: http://hei.com

An investor-owned electric utility that serves the island of Oahu in Hawaii.

Provides free teaching materials to educators **in the areas served by Hawaiian Electric and its subsidiaries Maui Electric Company and Hawaii Electric Light Company.** Services include classroom programs, career programs, resources for educators, certified workshops for educators, video, and classroom literature for kindergarten through grade 12. "Hawaii's Electric Century," an education module for Hawaiian history classes, is available for use in grades 4, 7, and 11. 63

Houston Lighting & Power Company
Community Relations/Educational Services
1111 Louisiana
P. O. Box 1700
Houston, TX 77251
(713) 207-1111 or (713) 207-7579
Fax: (713) 207-9892
E-Mail: lucretia-ahrens@hlp.com
Web: http://www.hlp.com

An investor-owned electric utility, headquartered in Houston, serving a 5,000-square-mile area on the Texas Gulf Coast.

Provides free educational services to kindergarten through grade 12 educators **in the Houston Lighting & Power service area.** Services include classroom presentations, films, videotapes, publications, and activity booklets for students. Resources and newsletters for educators

and teacher in-service training, as well as teacher workshops, are also available. In addition, curriculum supplements are available on science and social studies topics and on electricity safety and fuel sources. 64

Illinois Department of Commerce and Community Affairs
Office of Coal Development and Marketing
325 West Adams, Room 300
Springfield, IL 62704-1892
(217) 782-6370
Fax: (217) 785-2618
E-Mail: BAntonini@MHD084R1.State.IL.US
Web: http://www.ILCOMMERCE.com/

A State coal program committed to the continued and expanded use of Illinois' coal resources in environmentally safe and economically viable ways.

Provides materials on coal production, distribution, usage, research, development, and demonstration of clean coal technologies. Materials available include: *Coal is Cool Activity Book*, with 60 coal-related puzzles, which is recommended for kindergarten through grade 4; *Illinois Coal Teacher's Guide*, developed with lesson plans and hands-on activities for grades 5 through 8; a video, "Kids, Coal and the Environment"; and a poster, What's Coal Got To Do With You? All materials are free. Coal awareness and education efforts target the general public through the media, schools, and special programs in an attempt to diffuse myths regarding coal and to disseminate sound, scientific information. An order form listing all the various publications is available upon request. 65

Independent Petroleum Association of America
Information Services Department
1101 16th Street, N.W.
Washington, DC 20036
(202) 857-4722
Fax: (202) 857-4799
Web: http://www.ipaa.org

The national association representing independent crude oil and natural gas explorers/producers.

Provides for a fee an annual yearbook of statistics on the crude oil- and natural gas-producing States. *The Oil & Natural Gas Producing Industry In Your State* compiles exploration and production statistics for each producing State in a simple manner, suitable for junior high and senior high school students. **66**

Indiana Department of Education
Office of Program Development
Center for School Improvement & Performance
Room 229, State House
Indianapolis, IN 46204-2798
(317) 232-9186
Fax: (317) 232-9121

A State education agency that provides primary school and secondary school teachers with staff development programs and curricular assistance in environmental and energy education.

Provides energy, economics, and environmental curricular materials and workshops to kindergarten through grade 12 classroom teachers across Indiana. The *Energy, Economics, and the Environment* publication consists of case studies supported by classroom activities, actions, and issues. *Completing the Cycle--It's Up to Me* contains 55 interdisciplinary lessons that focus on recycling and the environment. This curriculum for kindergarten through grade 8 was written by classroom teachers from Frankfort Community Schools and Crawfordsville Community Schools. The Phase I booklet is designed for use in kindergarten through grade 3, and Phase II is for use in grades 4 through 8. A minimal charge will be assessed for each publication. A list of other environmental and energy education materials is available upon request. **67**

The Institute for Chemical Education (ICE)
Department of Chemistry
University of Wisconsin-Madison
1101 University Avenue
Madison, WI 53706-1396
(608) 262-3033
1-(800) 991-5534
Fax: (608) 265-8094
E-Mail: ICE@chem.wisc.edu
Web: http://ice.chem.wisc.edu/ice

A nonprofit educational organization that provides chemistry resources and graduate-level workshops for kindergarten through grade 12 teachers to better integrate hands-on chemistry into their classrooms.

Provides chemistry education materials and workshops to kindergarten through grade 12 teachers throughout the world. The publications, kits, and workshops are designed to help teachers include hands-on science activities in their everyday classrooms. ICE's *Topics in Chemistry* series provides background chemical and environmental information on everyday topics. Topics include: **Acid Rain**--a brief history of acid precipitation; the sources of gases that cause acid rain and their conversion to acid in the atmosphere; details of the effects of acid precipitation on the environment; and available alternatives to reduce emissions that contribute to acid rain. **Acid Rain, Experimental Supplement**--five experiments showing the effects of acid rain on the environment, using easy-to-find materials; notes on presentation and curriculum integration are included. **Ozone**--the chemistry, uses, and importance of ozone and chlorofluorocarbons; a history of theories involving their interactions in the atmosphere; the effect of ozone depletion on life; examination of changes in public policy; and the response of industry. **68**

Integrated Waste Services Association
1401 H Street, N.W., Suite 220
Washington, DC 20005
(202) 467-6240
Fax: (202) 467-6225

Integrated Waste Services Association (IWSA) represents companies that use trash to produce energy as part of a community's integrated solid waste plans. Waste-to-energy facilities use waste to generate enough energy to power 1.3 million homes.

IWSA offers *WasteWorld*, a middle school curriculum addressing environmental, economic, and energy-related issues associated with municipal solid waste management. Originally developed with the support of DOE's National Renewable Energy Laboratory, this multimedia simulation presents a balanced view of source reduction, recycling, waste-to-energy, and landfilling, enabling students to recommend solid waste management plans for their communities. The updated package includes a slide show, interactive computer software for both Macintosh and Windows (also available in color on CD-ROM), revised student activities and teacher's guide, glossary, and resources to supplement student research. Write or call for more information. 69

Jacksonville Electric Authority (JEA)
21 West Church Street
Jacksonville, FL 32202
(904) 632-5200
Fax: (904) 632-6335
Web: http://www.jea.com

A municipal electric utility serving over 320,000 customers in Jacksonville, FL, and vicinity.

Provides free energy educational resources (booklets, posters, kits, audio/visual materials, etc., for kindergarten through grade 12) to schools **within the JEA service area**. Services include student and teacher materials, speakers, power plant tours, teacher seminars with affiliates: Pelotes Island Preserve, Tree Hill, and the University of North Florida. A free fact sheet that describes the services and materials is available upon request. 70

Johnson Controls, Inc.
Academy of Energy Education
507 E. Michigan Street
Milwaukee, WI 53202
(414) 274-4197
(414) 274-5574
Fax: (414) 274-5030
E-Mail: mike.d.ewald@jci.com
michelle.l.tanem@jci.com
Web: http://www.johnsoncontrols.com/cg

Provides facility services and building control system solutions to meet the specific needs of all types of nonresidential buildings, which include training staff to operate equipment more efficiently, installing, maintaining, and servicing HVAC controls and mechanical systems, lighting controls, and life safety systems; performance contracting; and complete outsourcing operations.

Offers, in partnership with the National Energy Foundation and Upper Iowa University, the Academy of Energy Education, a curriculum-enhancing program that promotes energy education in kindergarten through grade 12 and expands into a school-to-work transition experience. Designed to encourage students to explore energy usage and its impact on the environment, the programs include: Energy Fun for kindergarten through grade 3; Energy Fundamentals for grades 4 through 6; Energy Action Patrol for grades 5 through 8; Energy Action Teams for grades 6 through 9; and Energy Action Technology for grades 9 through 12. For older students, the Academy features school-to-work and high school-to-college transition programs. For more information, call your local Johnson Controls office or NEF at 1-(800) 616-TEAM. 71

Keep America Beautiful, Inc.
1010 Washington Boulevard
Stamford, CT 06901
(203) 323-8987
Fax: (203) 325-9199
E-Mail: kabcomms@aol.com
Web: http://www.kab.org

A national nonprofit public education organization that is dedicated to improving waste-handling practices in American communities.

Offers educational materials for use in kindergarten through grade 12. *Waste in Place*, a curriculum supplement for educators of kindergarten through grade 6, introduces children to responsible

waste handling in over 30 hands-on lesson plans; and *Waste: A Hidden Resource*, a curriculum supplement for educators of grades 7 through 12, provides an overview of solid waste and encourages students' investigation and decisionmaking through role-playing in a mock crisis. Both are available for a fee. Other resources include *Plastics Recycling By The Numbers*, a classroom activity guide designed to teach students in grades 3 and 4 about plastic and its uses, the Plastic Container Coding System, and how to separate plastics for recycling; *Mister Rogers' Activity Book for Young Children*, which provides lessons on reuse and recycling; and "Pollution Pointers For Elementary Students," a one-page fact sheet which describes 24 things children can do. "Woody's Wise Waste Handling Tips for Kids" provides simple projects children can perform at home and in the classroom. These are available for a nominal fee. A free materials catalog is available upon request. Free samples of lesson plans and other publications are available at the above Web site. 72

Kids For A Clean Environment
(Kids F.A.C.E.)
P.O. Box 158254
Nashville, TN 37215
1-(800) 952-3223
Fax: (615) 333-9879
E-Mail: kidsface@mindspring.com

A nonprofit children's environmental organization.

Provides free membership to children and teachers. Included with membership is the membership guide *Our World, Our Future: A Kids Guide to Kids for a Clean Environment*; a membership certificate; and a subscription to the bimonthly newsletter *Kids F.A.C.E. Illustrated*. Material focuses on environmental topics and offers proactive projects that can be performed at home

or at school. Their current project is the Kids International Earth Flag. Children may send in squares with their idea of a clean environment drawn or painted on them. For instructions, send a self-addressed stamped envelope to the above address. 73

Kissimmee Utility Authority (KUA)
Office of Communications
P.O. Box 423219
Kissimmee, FL 34742-3219
(407) 933-7777
Fax: (407) 933-1761

A municipal electric utility serving over 45,000 customers in Kissimmee, FL, and vicinity.

Provides free energy educational resources (coloring books, booklets, calendars, posters, kits, audio/visual materials, etc., for use in kindergarten through grade 12) to schools **within the KUA service area**. Services include student and teacher materials, speakers' bureau, power plant and energy control center tours, and teacher seminars with neighboring utilities. A free color brochure highlighting the services and materials is available upon request. 74

The Learning Works
P.O. Box 6187, Dept. NEIC
Santa Barbara, CA 93160
(805) 964-4220
Fax: (805) 964-1466

A publishing firm specializing in children's educational books.

Publishes educational activity books for youth ages 4 to 17. Energy-related titles include: *Weather, Electricity, Environmental Investigations; Science Sampler; Primary Science Sampler; Earth Book for Kids: Activities to Help Heal the Environment; My Earth Book;* and *Likeable Recyclables*. In addition, stamps with environmental themes are available for a fee and may be ordered from school supply stores, bookstores, or the publisher. A free catalog is available upon request. 75

Midwest Renewable Energy Association
P.O. Box 249
Amherst, WI 54406
(715) 824-5166
Fax: (715) 824-5399

A grassroots private nonprofit educational organization dedicated to promoting renewable energy and energy efficiency through education and demonstration.

Offers special workshop series for teachers, children, and the general public. Hosts the Midwest Renewable Energy Fair every June at the Portage County Fairgrounds in Amherst, WI. This annual event features workshops, exhibits, speakers, a model home, renewable energy home tours, alternatively fueled vehicle showcase, regional Junior Solar Sprint competition, entertainment, and more. Offers year-round workshops on renewable energy and energy efficiency. A Renewable Energy/Energy Efficiency Directory is available for a minimal fee, as is *ReNews*, a quarterly newsletter. 76

Mineral Information Institute (MII)
475 17th Street, Suite 510
Denver, CO 80202
(303) 297-3226
Fax: (303) 295-6463

A nonprofit educational organization providing free resources and contacts to support classroom teachers. Also provides technical support to new and established earth science programs.

Provides mineral and energy information at no cost to teachers. Companies and other organizations may purchase MII materials at a nominal cost. Materials include posters, lessons, activities, and referrals to other sources providing free or low-cost educational information. The purpose of all materials is to increase awareness that *Everything We Have and Everything We Use Comes From Our Natural Resources*. MII sponsored and continues to support revisions to the high school integrated science textbook, *Global Science: Energy, Resources, Environment*. Teachers should write on school letterhead indicating grade(s) taught. For a fee, a Go Kit for Classroom Speakers is also available. 77

Minnesota Department of Public Service
121 7th Place East, Suite 200
St. Paul, MN 55101-2145
(612) 296-5175
Fax: (612) 296-0201
E-Mail: infocenter@dpsv.state.mn.us
Web: http://www.dpsv.state.mn.us

A State energy office which protects the public in utility rate and quality of service matters, provides a range of energy information, and promotes conservation and renewable resource development.

Provides a wide range of energy conservation materials (primarily brochures and fact sheets) targeted to residential, commercial, and industrial audiences. This information is designed to encourage specific conservation practices and to increase public awareness of energy/environmental issues. Some of these free materials may be appropriate for students in grades 8 through 12. More direct education efforts are geared toward Minnesota home builders and community energy auditors. The Department's Energy Information Center has a full-time staff to answer consumers' energy-related questions and to provide individualized advice as needed. 78

National Aeronautics and Space Administration (NASA)
300 E Street, S.W., Code FE
Washington, DC 20546-0001
Web: http://www.nasa.gov

A Federal agency with programs to advance the Nation's education goals through expanding and enhancing the scientific and technological competence of all students and educators.

Provides to educators free of charge teachers guides with classroom activities explaining NASA spaceflights and projects; NASA educational program information; NASA fact sheets; educational briefs; brochures; lithographs; wallsheets; nontechnical publications; and access to videotapes and slide sets for duplication. New NASA educational materials are listed triennially in the newsletter *Educational Horizons*, which is provided to educators. Educators can obtain a subscription from NASA at the address listed above. 79

National Arbor Day Foundation
100 Arbor Avenue
Nebraska City, NE 68410
(402) 474-5655
Fax: (402) 474-0820
E-Mail: mwickless@arborday.org
Web: http://www.arborday.org

A nonprofit education organization dedicated to tree planting, conservation, and environmental stewardship.

Provides free information on tree planting and care, including correctly planting windbreaks and shelterbelts, in the *Conservation Trees* and *Trees for America* brochures. Also has available for a nominal fee a book on *Trees for Fuelwood: A Step Toward Energy Diversity*, and, for elementary school- and middle school-age children, curriculum kits that stress the contributions made by trees and the importance of environmental stewardship. For samples of the free educational materials, including the *Celebrate Arbor Day!* booklet, and to receive information about the curriculum kits, write or call to request an *Educational Materials Sampler*. **80**

National Association of Conservation Districts (NACD)
408 East Main
P.O. Box 855
League City, TX 77574-0855
(281) 332-3402
1-(800) 825-5547
Fax: (281) 332-5259

A nongovernmental nonprofit organization representing nearly 3,000 soil and water conservation districts and their State associations in the 50 States and U.S. territories. NACD serves its member districts as one voice, utilizing the force of local initiative and self-government, in the conservation and development of natural resources.

Sponsors conservation education recognition programs for primary school and secondary school teachers as well as a poster contest for students. Publishes and distributes educational materials about conserving soil and water and other natural resources. Free materials include an education catalog containing all educational products available from NACD, information about the contest, and single copies of the *Guide to Careers in Natural Resource Management*. **81**

National Corn Growers Association
1000 Executive Parkway, #105
St. Louis, MO 63141
(314) 275-9915
Fax: (314) 275-7061
E-Mail: corninfo@ncga.com
Web: http://www.ncga.com

A nonprofit commodity organization representing nearly 30,000 corn farmers and 25 State-affiliated corn grower associations.

Provides teachers with a free educational kit, "Corn--A National Renewable Resource," which includes materials that recognize corn as a reservoir of energy and a renewable substitute for products made from expendable fossil fuels. Components of the kit include 30 student tabloids, a video, poster, resource booklet, activity sheets, sample experiments, and corn products. Accompanying Teacher's Guides provide supplementary information and integration ideas. *The World of Corn* resource booklet, a statistical look at corn markets and trends, can also be requested separately and is provided free by contacting the association. 82

National Cotton Council of America
Education Materials
1918 N. Parkway
Memphis, TN 38112
(901) 274-9030
Fax: (901) 725-0510
E-Mail: info@cotton.org
Web: http://www.cotton.org

A nonprofit commodity organization representing 35,000 producers and processors of raw cotton. The organization is dedicated to strengthening the cotton industry's ability to compete effectively and profitably in the raw cotton, oilseed and value-added product markets at home and abroad.

Provides for a nominal fee a variety of print and audiovisual materials on cotton, including a videotape about the highly successful and environmentally sound "National Boll Weevil Eradication Program." The tape, primarily for grades 3 through 12, includes a 3-minute program aired on the "Today's Environment" television series on the Discovery Channel. The eradication program uses an integrated approach for eliminating one of the U.S. cotton industry's major

pests, such as plowing down cotton stalks after harvest, the strategic placement of traps baited with a pheromone (sex attractant), and the judicious application of crop protection products. 83

National Energy Education Development Project (NEED)
P.O. Box 2518
Reston, VA 20195
(703) 860-5029
Fax: (703) 860-2903
E-Mail: need@erols.com
Web: http://energyconnect.com/need

A national network of students, educators, and leaders in government and industry dedicated to providing comprehensive energy programming.

Through hands-on science, math, museums, drama, art, and music, students reach out to family and community with energy education programs that they have developed themselves. Memberships are available to teachers at little or no cost. Members can receive the following: the "Local Participation Kit"--a curriculum packet filled with hundreds of activities; energy and leadership training workshops across the United States; a subscription to *Energy Exchange* magazine; the opportunity to order a variety of supplemental materials free of charge; and the chance to participate in the Annual Youth Awards Program--a program dedicated to recognizing the most creative and innovative energy programs in the United States. New activities for the 1996-1997 school year include: "Primary Energy"--activities and stories for younger students; the "Primary Carnival"--a series of games to reinforce kindergarten through grade 3 knowledge; "Global Trading Game" -- an international look at the energy trade; "Energyline"--an interactive program for the classroom focusing on alternative fuels and DOE's Clean Cities program.

Also offered for a reduced cost will be a set of videos focusing on renewable energy/energy conservation and fossil energy. In fall 1997, the 1997-1998 materials on electricity and many fun new programs will be released. 84

National Energy Foundation (NEF)
Resources for Education
National Office
5225 Wiley Post Way, Suite 170
Salt Lake City, UT 84116
(801) 539-1406
Fax: (801) 539-1451
E-Mail: nef@xmission.com
Web: http://www.xmission.com/~nef

A nonprofit educational organization providing educational resources and training services to educators.

Announces the establishment of the new NEF Academy. The Academy is a nationwide program of the Foundation which provides university graduate credit to educators for implementation of energy, environmental, and natural resources education in their classrooms. Academy course topics include energy conservation, rocks and minerals, and natural gas fundamentals and safety. Also included is the NEF award-winning Energy Action Patrol. Each course is independent study, with credit offered from accredited universities. New products available from NEF include two posters, "Petroleum Technology: From Refinery to Home, Business, and Industry;" and "Natural Gas Safety in and Around Your Home." Other new publications include for grades 4 through 6, a guide entitled, *Natural Gas Fundamentals and Safety* and for kindergarten through grade 3, a guide entitled *Natural Gas Fun and Safety*. NEF

currently has active educational partnerships with private and government entities nationwide, including an educational materials fulfillment program which provides free natural gas education materials to educators around the country. NEF also offers in-service support to sponsors and school districts. A free full-color catalog of educational resources is available free upon request. **85**

National Geographic Society
Educational Services
1145 17th Street, N.W.
Washington, DC 20036
1-(800) 368-2728
Fax: (301) 921-1575
Web: http://www.nationalgeographic.com

A nonprofit organization.

Provides educational materials designed for the kindergarten through grade 12 earth, physical, and environmental sciences curriculum. Materials include filmstrips, videos, books, atlases, globes, software, maps, posters, Wonders of Learning kits, picture pack transparency sets, interactive videodiscs, and CD-ROM's. The National Geographic Kids Network, a telecommunications-based science curriculum for elementary school-grade levels, is also available. Free catalogs are available upon request. **86**

The National Hydropower Association
122 C Street, N.W.
Washington, DC 20001
(202) 383-2530
Fax: (202) 383-2531
E-Mail: hydroinfo@aol.com
Web: http://www.hydro.com

An association dedicated to building greater public awareness of the advantages of hydropower as our Nation's most plentiful renewable energy source.

Offers a variety of materials on the production of hydropower, hydro's economic and environmental benefits, and the issues facing the hydropower industry. Posters and educational curriculum are available at nominal cost. An annual conference is held every spring, featuring a variety of educational programs. NHA works closely with the U.S. Export Council for Renewable Energy, the Fund for Water and Energy Education, and other organizations dedicated to hydropower and other forms of renewable energy. Staff is available to answer specific questions and to help identify sources of additional information. **87**

National Mining Association
1130 17th Street, N.W.
Washington, DC 20036
(202) 463-2625
Fax: (202) 857-0135
E-Mail: nma@planetcom.com
Web: http://www.nma.org

A trade association representing producers of America's coal, metals, industrial minerals, and agricultural minerals; mining equipment manufacturers; and engineering, consulting, and financial institutions that serve the mining industry.

Provides educational materials on mining in the United States and the importance of minerals in our daily lives. A video, "Mining: Discoveries for Progress," and a brochure, *What Mining Means to Americans*, are available for a fee to the general public. Single copies are available free to a teacher requesting them on school letterhead. Other materials are available upon request. **88**

National Network of Energy and Environmental Education Professionals
302 West Hill Street
Champaign, IL 61820
(217) 359-9442
Fax: (217) 359-9446
E-Mail: educational_dividends@compuserve.com
Web: http://www.leeric.lsu.edu/network/network.htm

A grass roots membership organization comprised of program managers in government, business, education and nonprofit organizations. Goal is to serve as an information coordinator and to promote the expansion of energy and environmental education.

Information is available on educational materials and activities in all aspects of energy and environmental areas. Assistance is available on questions regarding programs in your area, developing energy and environmental lessons, or integrating energy and environmental information into existing lessons. Network membership is available for a fee, which allows access to field-tested materials, projects and strategies which can be included in your program, assistance with curriculum development, evaluation, incorporating the arts or marketing your program. Members meet annually at a Networking Conference and information is exchanged through the organization's newsletter, *Network News*, the Network Home Page and through personal contacts. 89

National Propane Gas Association
1600 Eisenhower Lane, Suite 100
Lisle, IL 60532
(630) 515-0600
Fax: (630) 515-8774
E-Mail: npga@genie.geis.com
Web: http://www.propanegas.com

A national trade association comprising 3,600 companies representing all aspects of the propane industry.

Provides environmental, safety, and propane industry information in fact sheets, a coloring book, and an activity book. Also available are an Energy Costs Comparison Calculator and four propane gas student education kits: one for use in kindergarten through grade 3; in grades 4 through 6; in junior high school; and in high school. 90

National Rural Electric Cooperative Association
Communications Department
4301 Wilson Boulevard, CD10-222
Arlington, VA 22203
(703) 907-5709
Fax: (703) 907-5519
Web: http://nreca.org

A service organization based in Arlington, VA. Represents the Nation's 1,000 nonprofit consumer-owned rural electric systems, which provide electric service to more than 25 million people in 46 States.

Provides educational booklets and pamphlets aimed at junior and senior high school students (as well as adults). Publications include *History of Rural Electrification; Energy and Electricity* (includes a home safety audit); *Facts About America's Rural Electric Systems;* and *Occupations in Rural Electrification.* Publications are for sale. An order form for the materials is available upon request. **91**

National Science Foundation
Office of Legislative and Public Affairs
4201 Wilson Boulevard, Room 1245
Arlington, VA 22230
(703) 306-1070
Fax: (703) 306-0157
E-Mail: nstw@nsf.gov
Web: http://www.ehr.nsf.gov

A Federal agency that supports basic science and engineering research and education.

National Science and Technology Week (NSTW), a collaborative effort of the National Science Foundation and corporate sponsors, features partnerships with community institutions (e.g., schools, libraries, museums, zoos); a special focus activity encourages parents to join their children in discovering science in their everyday activities and interests. Materials include an NSTW annual poster, "training activities" packets, and "sharing science" brochures that alert the public to scientific discovery. Activities and materials promote: (1) the sharing of information

on science curriculum and education trends; (2) developing "Science Day" activities; (3) organizing community-wide contests or events; and, (4) recruiting scientific and technical personnel to advise children about careers. 92

National Science Resources Center (NSRC)
Arts and Industries Building, Room 1201
Washington, DC 20560
(202) 357-4892
Fax: (202) 786-2028
Web: http://www.si.edu/nsrc

Collects and disseminates information about exemplary science teaching resources, develops innovative science curriculum materials, and sponsors outreach activities to help school districts develop and sustain hands-on science programs. Relevant titles include: *Resources for Teaching Elementary School Science*, an elementary science resource guide; *Electric Circuits, Magnets and Motors; The Technology of Paper;* and *Ecosystems*, inquiry-centered curriculum units in the Science and Technology for Children (STC) elementary science program. 93

NSRC is operated by the Smithsonian Institution and the National Academy of Sciences to improve the teaching of science in the Nation's schools.

National Science Teachers Association
Publications
1840 Wilson Boulevard
Arlington, VA 22201
(703) 243-7100
1-(800) 722-NSTA
Fax: (703) 243-7177
Web: http://www.nsta.org

The largest science teachers association in the United States, working to improve the quality of science education nationwide.

Publishes educational products and activity books for students from kindergarten through college. Titles include: *Earth: The Water Planet; Water, Stones & Fossil Bones; Ten-Minute Field Trips; Energy Sources and Natural Fuels; Taking Charge: An Introduction to Electricity; Water Matters; Middle Level Energy Series; Project Earth Science: Astronomy; Project Earth Science: Meteorology; Project Earth Science: Physical Oceanography; Project Earth Science: Geology; Earth At Hand;* and *Understanding Our Environment*. These books are available for a fee. A free catalog is available upon request. 94

National Wildlife Federation
8925 Leesburg Pike
Vienna, VA 22184-0001
1-(800) 822-9919
Fax: (703) 442-7332
Web: http://www.nwf.org

A nonprofit conservation education organization. The mission of the National Wildlife Federation is to educate, inspire, and assist individuals and organizations of diverse cultures to conserve wildlife and other natural resources and to protect the earth's environment in order to achieve a peaceful, equitable, and sustainable future.

Publishes *Your Big Backyard, Ranger Rick, National Wildlife,* and *International Wildlife* magazines for children and adults; produces the environmental education activity series *NatureScope* for educators; produces the annual "National Wildlife Week" Educator's Kit; and produces the *Animal Tracks Activity Guide* for educators, a companion workbook for children, and an Animal Tracks educator resource on the Web site listed above. Call toll-free and ask for more information on our new Schoolyard Habitat Program and the rest of our educational outreach programs. 95

The Natural Gas Vehicle Coalition
1515 Wilson Boulevard, Suite 1030
Arlington, VA 22209
(703) 527-3022
Fax: (703) 527-3025

Acts as a clearinghouse for information on natural gas vehicles for members and the general public. General information packets and the *Member Business Guide*, a list of member equipment suppliers and the products and services they provide, are available free of charge. Also available for a nominal fee is "The Road to Clean Air," a 12-minute educational video which features actress Lindsay Wagner describing the virtues of natural gas vehicles. 96

A national trade association and commercialization organization supported by gas companies, natural gas vehicle equipment suppliers, local government agencies, and other companies committed to developing profitable, long-term markets for natural gas vehicles.

New York State Geological Survey
3136 Cultural Education Center
Albany, NY 12230-3136
(518) 474-5816
Fax: (518) 473-8496
E-Mail: rfakundi@museum.nysed.gov

Provides free educational leaflets for both students and teachers for kindergarten through grade 12. Provides a limited number of honoraria for college-level geological research in New York State. Conducts workshops and classes in geological sciences through the New York State Museum in Albany, NY. Produces geological maps and reports for both professionals and the general public. A catalog of publications is available free upon request. 97

The mission of the New York State Geological Survey is to make services available to all agencies and people of New York State; conduct geological research; and cooperate with agencies of other States, Federal Government, educational institutions, and industry in the discovery, analysis, and dissemination of geologic information.

The NoodleHead Network
107 Intervale Avenue
Burlington, VT 05401
1-(800) 639-5680
(802) 862-8675
Fax: (802) 864-7135
E-Mail: noodlhed@together.net
Web: http://www.noodlehead.com

An educational video producer and distributor that creates videos from a kid's viewpoint.

Produces and distributes educational videos for kids. Specializes in energy-related videotapes for utilities and the kindergarten through grade 12 school market. Kids play an integral role in the creation of each tape--from scriptwriting to acting to editing. Titles include: "Simple Things You Can Do To Save Energy," "Simple Things You Can Do To Save Energy In Your School," and "KnuckleHead's Electrical Safety Series." Videos are available for purchase in VHS format or with duplication and broadcast rights. Free catalogs and preview copies of the videos are available upon request. 98

Northeast Utilities
Community Relations-Educational Programs
P.O. Box 270
Hartford, CT 06141-0270
(203) 665-2752
Fax: (203) 444-4283

An investor-owned electric utility serving Connecticut, western Massachusetts, and New Hampshire.

Provides educational services free to educators and organizations **in the areas served by Northeast Utilities**. Offers visits to information centers, tours, classroom presentations, nature trails and environmental education, speakers' bureau, safety presentations, film/video- and computer software-lending libraries, energy/nuclear energy curriculum and related literature, teacher workshops, and teaching kits. Booklets and posters for kindergarten through grade 12 are available. Also has pamphlets on home appliances, insulation, heating and cooling, and weatherization.

Connecticut Yankee Information
& Science Center
362 Injun Hollow Road
Haddam Neck, CT 06424-3099
(860) 267-9279
1-(800) 348-INFO (CT only)

Millstone Information & Science Center
278 Main Street
Niantic, CT 06357
(860) 691-4670
1-(800) 428-4234 (CT only)
Fax: (860) 691-4676

Northfield Mountain Recreation
& Environmental Center
99 Millers Falls Road
Northfield, MA 01360
(413) 659-3714
Fax: (413) 659-4460

Public Service of New Hampshire
Amoskeag Fishways Learning Center
1000 Elm Street
P.O. Box 330
Manchester, NH 03105
(603) 626-3474
Web: http://www.psnh.com

The Science & Nature Center
at Seabrook Station
Box 300, RT 1
Seabrook, NH 03874
(603) 474-9521, Ext. 2727
1-(800) 338-7482 (New England only)
Fax: (603) 474-9521, Ext. 2782

99

Northern Indiana Public Service Company
Corporate Citizenship
ATTN: Educational Services
5265 Hohman Avenue
Hammond, IN 46320
(219) 647-6215
Fax: (219) 647-4010
E-Mail: jawillia@nipsco.com
Web: http://www.nipsco.com

A regulated electric and natural gas public utility serving the northern third of Indiana.

Provides, free to primary school and secondary school educators **within its service territory**, power plant tours, films, videos, publications, activity booklets, and, upon request, a *Teaching Resources Catalog*. **100**

Northern States Power Company
Community and Economic Development Department
414 Nicollet Mall (RS4)
Minneapolis, MN 55401
(612) 330-6677 (school-to-work)
(612) 330-6538 (speakers)
(612) 330-6048 (tours)
(612) 330-7976 (energy safety demos)

An investor-owned electric and natural gas utility serving parts of Minnesota, Wisconsin, North Dakota, South Dakota, and northern Michigan.

Provides educational services free to educators **in the areas served by Northern States Power Company**. Offers visits to two nuclear plant training centers and Minnesota's largest coal-fired plant; energy and environmental education curriculum; speakers' bureau; job shadowing; and career exploration. **101**

Nuclear Energy Institute
1776 I Street, N.W., Suite 400
Washington, DC 20006-3708
(202) 739-8000
Fax: (202) 785-4019
E-Mail: SEB@nei.org
Web: http://www.nei.org

The nuclear energy industry's Washington-based policy organization.

Provides a variety of publications on nuclear energy issues, including the benefits of electricity generated by nuclear power, public opinion data on nuclear energy, and statistical data on nuclear energy. Complimentary packets of material are available for students and teachers. A complimentary booklet on nuclear energy is available to the general public. For more information, contact the NEI Publications Office. **102**

Nuclear Information and Resource Service
1424 16th Street, N.W., Suite 601
Washington, DC 20036
(202) 328-0002
Fax: (202) 462-2183
E-Mail: nirsnet@igc.org
Web: http://www.nirs.org

A nonprofit information clearinghouse.

Furnishes fact sheets on nuclear waste, safety, general information, and alternative energy. Single copies are available. Free brochures available include *10 Basic Questions About Nuclear Power* and *Nuclear Power? Consider the Alternatives*. *The NIRS Energy Audit Manual: How to Audit Campus & City Buildings*, also available for a fee, includes chapters on lighting efficiency, heating, and air conditioning designed to help students calculate energy and cost savings for their school (high school and above). Current information on nuclear industry and events is available, as well as a catalog of related articles. **103**

OG&E Electric Services
Community Services
P.O. Box 321 MC 1204
Oklahoma City, OK 73101
(405) 553-3015
Fax: (405) 553-3508
E-Mail: pangbor1@oge.com
Web: http://www.oge.com

An investor-owned electric utility serving parts of Oklahoma and western Arkansas.

Provides educational materials free to educators **in the areas served by OG&E Electric Services.** Materials include films/videos, literature, multimedia kits with teacher/student materials. Activity booklets and a teacher resource guide are also available. **104**

Ohio Oil & Gas Association
1718 Columbus Road, SW
P.O. Box 535
Granville, OH 43023-0535
(614) 587-0444
Fax: (614) 587-0446
E-Mail: tstewart@ohiolinks.com

Formed in 1947 to protect, promote, foster and advance the common interests of those engaged in all aspects of the Ohio crude oil and natural gas producing industry. With a membership of 1,400 members, this is one of the largest organizations of its kind in the United States.

Offers the following materials: Drill Bits, a series of informational news articles concerning issues of public interest; *Facts at a Glance*, an informational brochure about the Ohio crude oil and natural gas industry; *The Energist: Getting to Know Natural Gas* (single copy); and a booklet listing educational resources of the Ohio Division of Geological Survey. Also available is a list of several hundred products made from petroleum; and activities and puzzles designed for classroom use. **105**

Oklahoma Energy Resources Board
3555 N.W. 58th, Suite 430
P.O. Box 18738
Oklahoma City, OK 73154
(405) 942-5323
1-(800) 664-1301
Fax: (405) 942-3435
E-Mail: oerb@oipa.com

An oil and natural gas industry-funded state agency dedicated to energy education and restoring environmentally damaged orphaned and abandoned oil and gas production and exploration sites.

Provides to Oklahoma educators free of charge the following: teachers guides with classroom activities for *Fueling Around* and *Fossils To Fuel*, two science-based energy curriculum units for elementary and middle schools. Also sponsors 2-day teacher workshops free of charge (and reimburses school districts for substitute pay during workshops). Offers free of charge a state-wide coordinated program entitled Petroleum Professionals in the Classroom. This interactive hands-on program is presented by oil and natural gas industry volunteers who bring energy facts to the classroom in 45-minute presentations. Also free of charge is an oilfield safety video, "Play It Smart!." Geared to middle school students, it explains the dangers of playing around oilfield equipment. It stars members of the Dallas Cowboys football team as well as other football teams. **106**

Omaha Public Power District
Consumer Relations Department
444 South 16th Street Mall
Omaha, NE 68102-2247
(402) 636-3747
Fax: (402) 636-3922

A public utility serving the electric needs of customers in eastern Nebraska.

Provides educational services free of charge to schools in the utility's service area. Services include classroom programs and speakers, career planning information, films/videos, tours of power plants and other facilities, and

literature for students and teachers in all grades. Also provides information on Omaha Public Power District's Buddy Alert and Safetysaurus Programs. All materials available upon request. 107

Pacific Gas & Electric Company
Customer Energy Management Department
444 Market Street, Room 1634 - T16A
P.O. Box 770000
San Francisco, CA 94177
(415) 973-2232
Fax: (415) 973-4961
E-Mail: SLF1@PGE.com
Web: http://www.PGE.com

An investor-owned utility serving more than 4 million residential customers.

Provides the *Energenius Educational Series*, several complete curriculum programs focusing on energy efficiency and gas and electric safety education for grades 1 through 8. Curriculum materials **are provided at no cost to schools within the service territory** and can be purchased by schools, utilities, and organizations outside Pacific Gas & Electric's service territory. *Energenius Educational Series* comes complete with teacher curriculum guide and student activities for each student. The core of the series consists of multi-lesson classroom programs designed to engage students in active, age-appropriate learning and to relate to pace-setting curriculum standards such as those of the State of California. Games and activities can be used inside or outside the classroom and involve both young people and their families. 108

Pennsylvania Power & Light Co.
Energy Education Coordinator, A9-4
Two North Ninth Street
Allentown, PA 18101-1179
(610) 774-6914
Fax: (610) 774-6503

An investor-owned electric utility serving all or parts of 29 counties covering a 10,000-square-mile area in central eastern Pennsylvania.

Provides free energy education teaching materials to educators **in the utility's service area**. Materials include kindergarten through grade 12 curriculum units (teacher workshops required), Nuclear Energy Seminar for Teachers (NEST: worth 3 continuing education credits), Teacher Environmental Awareness (TEA) workshops, electrical safety programs (including a student poster contest), a minigrant program for teachers (up to $500 funding), *Energy in Education* newsletter, *Electric Vehicle* teachers guides (kindergarten through grade 12); *Electric and Magnetic Field* teachers guide (grades 7 through 12); and *Electric GO-Cart Rally* for a limited number of high schools. Write or call for schedules of programs or for more information. **109**

Plastic Bag Association
Plastic Bag Information Clearinghouse
1817 E. Carson Street
Pittsburgh, PA 15203
1-(800) 438-5856
Fax: (412) 381-8890
E-Mail: pbainfo@aol.com
Web: http://www.plasticbag.com

A consortium of the industry's leading manufacturers and suppliers who work together on industry issues and focus on promoting the functional and environmental benefits of plastic bags.

Provides educational resources for elementary and middle-school educators and information for consumers to increase public understanding of the facts related to plastic bags and the environment. "Don't Let a Good Thing Go to Waste" is an environmental education program for students in grades 2 through 5. Its interactive, interdisciplinary activites help students

discover that they can make a difference in solving solid waste challenges by practicing the 3Rs: Reduce, Reuse and Recycle. The Earth: Mission Possible poster is a colorful puzzle activity that helps elementary students become aware of ways to conserve natural resources. "An Ounce of Prevention" middle-school curriculum and its poster-lesson plan on the Life of a Hamburger comprise a complete resource for teaching the elements of waste generation and waste prevention. The full 15-activity curriculum, developed with the National Science Teachers Association and Dow Chemical Company, helps students see how many resources are consumed and how much waste is generated in daily-life activities, such as eating a hamburger and choosing plastic or paper at the supermarket check-out counter. These activities help them realize the value of prevention when it comes to waste.

Consumers can obtain information on the environmental benefits of plastic in the *Life of a Plastic Bag* brochure and can also locate the nearest plastic bag recycling collection site by calling the above number. The above Web site provides information on plastic bags and the environmental 3Rs, as well as the lesson plans for teachers and a student puzzle activity with an Earth Day message. All materials are free. **110**

Polystyrene Packaging Council
1801 K Street, N.W., Suite 600K
Washington, DC 20006
(202) 974-5321
Fax: (202) 296-7354
E-Mail: pspc@socplas.org
Web: http://www.polystyrene.org

A nonprofit trade association dedicated to providing information about environmentally responsible methods of solid waste disposal for polystyrene and polystyrene recycling programs nationwide. Polystyrene Packaging Council's membership includes manufacturers of polystyrene resin, polystyrene foam and rigid food service packaging, and polystyrene protective shape-molded and loose-fill packaging.

Offers *The Polystyrene Packaging and the Environment Sourcebook*, an easy-to-use reference guide for teachers that includes descriptions of available materials involving plastics and the environment. Also offers age-specific classroom activities, which were prepared with the guidance of science teachers nationwide, that look at the role of plastics in our everyday lives. One copy is available free of charge. **111**

Procter & Gamble
Educational Services
P.O. Box 14009
Cincinnati, OH 45250-0009
(513) 945-8450
Fax: (513) 945-8979
E-Mail: true.tb@pg.com

Public Affairs Division of a consumer products company.

Offers the free environmental education teaching kit "Planet Patrol" for grades 4 through 6. Materials teach students how to be a part of the solution to America's growing solid waste crisis. The teaching unit includes teacher's guide, student worksheets, and classroom poster. **112**

The Radon Group, Ltd.
P.O. Box 80653
Portland, OR 97280-1653
(503) 245-7092
Fax: (503) 245-7092

Hands-on energy education program developers and distributors.

Provides easy-to-use "hands-on" kits meeting Education 2000 goals. Products work with all major science texts. Kits contain teacher guide, student masters,

vocabulary, and hardware. Titles include the following: "Insulation Station Kit" on energy efficiency for grades 4 through 9; "Partnerships For A Work Ready America Kit," a conservation program for grades 10 through 12; "Generating Electricity Suitcase Kit" and a video "Zap Rap" on electricity safety for grades 3 through 8; "Nuclear Energy Kit" for grades 4 through 9; and "Solar Photovoltaic Suitcase Kit" and "Hydroelectricity - Water Power Suitcase Kit" for grades 2 through 8. Custom teacher in-service programs are sponsored by participating utilities. Materials are provided free of charge by most utilities. Products may be purchased directly from the company. A free catalog is available. **113**

Railroad Commission of Texas
P.O. Box 12967
Austin, TX 78711-2967
(512) 463-7114 (TEAM materials)
(512) 463-7006 (Alternative Transportation Fuels materials)
Fax: (512) 463-6702
E-Mail: hurt@rrc.state.tx.us

A State energy agency that regulates the oil and gas, alternative fuels and surface mining industries in Texas. The Commission serves Texans by: its stewardship of natural resources and the environment, its concern for personal and community safety, and its support of enhanced development and economic vitality.

Provides educational materials free to Texas teachers (kindergarten through grade 12) during Texas Energy Awareness Month (TEAM) each September. Texas oil and gas materials include suggested lesson plans, blackline masters for bookmarks and bulletin boards, a speaker's bureau, and resource lists. Also provides free educational workshops and supplemental curriculum materials called *Alternative Transportation Fuels* for secondary science teachers in Texas. These materials are correlated with TAAS and essential elements and are provided to participants in the workshops only. Materials include a video called "Way Cool Fuels," posters, a game and additional resources. Also includes multi-lesson units entitled:

"What is Energy?," "Fuels for Everything," "What are Alternative Transportation Fuels?," Air Pollution and Health," "Dollars and Sense," and "Technology." A teacher's guide, glossary, bibliography and a list of additional resources are provided. Workshops will be offered across Texas during 1997. Participating teachers receive extra-duty pay or reimbursements for substitute fees. *Alternative Transportation Fuels* is a joint project of the Texas Railroad Commission, the Texas General Land Office, and the Texas Education Agency and is funded from grants from the U.S. Department of Energy, the Texas State Energy Conservation Office, and the Texas Alternative Fuels Council. **114**

Renewable Fuels Association
One Massachusetts Avenue, N.W.
Suite 820
Washington, DC 20001
(202) 289-3835
Fax: (202) 289-7519
E-Mail: etohrfa@erols.com
Web: http://www.EthanolRFA.org

A national nonprofit association promoting domestically produced renewable ethanol as an alternative to imported energy sources.

Provides general information and educational fact sheets free of charge on ethanol, a clean-burning, renewable fuel produced from agricultural feedstocks and wastes. Topics include "Ethanol and Clean Air," Ethanol and the Economy," "Ethanol and Agriculture," "Ethanol vs. Imported Energy," "Ethanol's Performance as a Fuel," and "Future Opportunities." Additional information is available free of charge by visiting the above Web Site or calling the above number. **115**

Renew America
1400 16th Street, N.W., Suite 710
Washington, DC 20036
(202) 232-2252
Fax: (202) 232-2617
E-Mail: renewamerica@igc.apc.org
Web: http://www.crest.org/renew_america

The Nation's source for environmental solutions.

Promotes successful environmental programs to foster their replication and expansion. Publications available for purchase include the *Environmental Success Index*, a directory of more than 1,600 verified programs; and topic reports on various environmental topics. *Kids! Renew America* is also available free of charge. **116**

Safe Energy Communication Council
1717 Massachusetts Avenue, N.W.
Suite 805
Washington, DC 20036
(202) 483-8491
Fax: (202) 234-9194
E-Mail: seccgen@aol.com

A national nonprofit coalition fighting for environmentally safe, affordable energy.

Offers a free poster with everyday suggestions on how to save the earth. Publications and graphics that deal with a variety of issues, such as nuclear power, nuclear waste dangers, global warming, energy efficiency, and renewable energy, are available for a nominal fee. Titles include: *MYTHBusters #8: "Low-Level" Radioactive Waste; MYTHBusters #9: Nuclear Power Economics; MYTHBusters #10: International Nuclear Power;* and *Power Boosters: Ohio's Energy Efficiency Success Stories.* Request a publications list for other titles. **117**

Science Screen Report
1000 Clint Moore Road
Boca Raton, FL 33487-2806
1-(800) 232-2133
Fax: (561) 241-0707

The only videotape program made available free of charge to schools through corporate sponsors.

An ongoing secondary school-level videotape program that focuses on the most recent developments in science, technology, and engineering. Produced since 1970 with the active participation of the National Science Teachers Association, "Science Screen Report" (SSR) is designed to stimulate student interest in the challenges, rewards, and opportunities of pursuing scientific careers. More than 550 corporations currently sponsor "SSR" to 3,000 school districts nationwide. Tapes become the permanent property of the school system to allow repeated use year after year.

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Science Service
1719 N Street, N.W.
Washington, DC 20036
(202) 785-2255
Fax: (202) 785-1243
E-Mail: youth@scisvc.org
Web: http://www.tss-inc.com/sciserv

Founded in 1921, a nonprofit scientific and educational organization that promotes scientific literacy, with special emphasis toward young people and, more recently, members of under-represented groups.

Science Service administers two youth programs. The International Science and Engineering Fair (ISEF) is a competition for students in grades 9 through 12. Students participate in their regional and/or State ISEF-affiliated fair. Two individual student projects and one team project of up to three students are chosen to participate in the ISEF. Participants are eligible for scholarships, scientific field trips, summer research internships, and equipment. The Westinghouse Science Talent Search awards $205,000

in scholarships to 40 finalists. Top prize is a $40,000 scholarship. Participants must be seniors in high school. Students submit a report of an independent research project in the sciences, official entry form, transcript, test scores, and teacher recommendations. The submission deadline can be as early as late November, but no later than early December. For an official entry form and specific deadline, contact Science Service. 119

Shell Oil Company
Corporate Communications
P.O. Box 2463
Houston, TX 77252-2463
(713) 241-6161

Oil company department that responds to public inquiries pertaining to energy and environmental issues.

Offers *Oil*, a booklet describing the origin of oil and its production, conversion to thousands of products, and distribution to customers around the world. Also available are *A Story of Achievement*, a brief history of the Shell Oil Company, and *Let's Collect Rocks and Shells*. Booklets are free of charge, but quantities are limited. 120

Simon and Schuster Children's Publishing Division
Marketing Department
1230 Avenue of the Americas, 4th Floor
New York, NY 10022
(212) 698-2806
Fax: (212) 698-4350

A children's trade book publisher of both fiction and nonfiction titles for kindergarten through grade 12.

Offers a variety of energy, science, and environmental books from 4 imprints, including such titles as: *Nuclear Energy* by Pringle; *Weather Forecasting* by Gibbons; *The Big Storm* by Hiscock; and *Before the Sun Dies* by Gallant. Provides free catalogs. 121

SME
P.O. Box 625002
Littleton, CO 80162-5002
(303) 973-9550
1-(800) SME-3132
Fax: (303) 973-3845
E-Mail: smenet@aol.com
Web: http://www.smenet.org

A nonprofit educational organization providing educational resources related to energy, minerals, and mining. The Society for Mining, Metallurgy & Exploration, Inc., (SME) is the worldwide professional society for mining engineers.

Offers both free and for-sale materials including classroom resource guides, posters, videos, and computer programs. Also can provide teachers with contacts among SME members in most geographic locations who are willing to help in teaching about minerals and mining. 122

Smith College
Elm Street
Northampton, MA 01063
(413) 584-2700
Fax: (413) 585-2075

A private academic institution.

Offers the project, An Electricity Curriculum Based on Capacitor-Controlled Transient Lamp Lighting, which reveals the physics of current propulsion. This high school electricity curriculum engages students in hands-on experimentation. It includes three instructional aids (*Introductory Workshop Guide*, *Classroom Resources Book*, and *Background Information File*) which enhance the teacher's own understanding of electric circuits and make the study of electricity enjoyable for students. 123

Solar Energy Industries Association
122 C Street, N.W., 4th floor
Washington, DC 20001
(202) 383-2600
Fax: (202) 383-2670
E-Mail: info@seia.org
Web: http://www.seia.org

A nonprofit national trade association which represents the photovoltaic and solar thermal manufacturers and component suppliers.

Publishes *Renewable Energy Fact Sheets*, which include information and classroom activities. Also produces *Solar Science Activities*, which includes dozens of classroom activities for grades 5 through 9, and *Energy, Technology and Society*, which is geared for high school students and provides information on alternative energy technologies. All are available for a fee. A free publications catalog is available upon request. CD-ROM educational modules are available through the Solar Energy Research and Education Foundation.
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Solar Now
Beverly High School
100 Sohier Road
Beverly, MA 01915
(508) 927-9SUN
E-Mail: solar19@nfi.com

A national nonprofit organization providing education about all forms of renewable energy to teachers, students, and environmentalists.

Provides programs for students and educators seeking hands-on renewable energy education. Based at one of the Nation's largest photovoltaic sites, our field study center also hosts a 10kW windmill and an interactive classroom. Field trips to the site are free and may be arranged by calling the above number. The following are also available: comprehensive teacher education workshops, summer internships for college students, a library of renewable energy activities, and student conferences.
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Steel Recycling Institute
680 Andersen Drive
Pittsburgh, PA 15220-2700
1-(800) 876-7274
Web: http://www.recycle.steel.org

An industry association dedicated to promoting and sustaining steel recycling across the country.

Provides materials for primary, middle and secondary school educators. Materials include *Nature's for ME*, a preschool teacher's guide filled with nature-related interactive exercises; "YES I CAN!," a video and teacher's guide for grades 1 through 3; "Roscoe's Totally Cycled World," a new middle school CD-ROM with interactive missions in science, language arts, math and social studies; and "Cycles for Science," high school curriculum supplements for Biology, Chemistry, Physics and Earth/Life Science, and a community volunteer activities guide to support the program. Information and prices are available through order forms. Additional materials such as activity sheets (black sheet masters), a coloring poster, and a wall poster are available. Please indicate grade level(s) for which materials or order forms are needed.**126**

The Sugar Association, Inc.
1101 15th Street, N.W., #600
Washington, DC 20005
(202) 785-1122
Fax: (202) 785-5019

Established in 1943, the Sugar Association maintains an active role in informing the public about the role that sugar can play, in moderation, in a healthful diet. By creating public education programs with a variety of diet, health, nutrition, and fitness materials, the Association has worked to dispel misconceptions about sugar as well as provide opportunities for continued scientific research.

Offers Sugar Science: Photosynthesis to Food, a computer software package that explains the processes of photosynthesis and respiration as well as the role of plants in the food chain. This interactive software also provides experiments on sugar's functional role in food processing, including yeast interaction (baking), preservation (jams and preserves) and freezing (ice cream). The

program, available for a fee, was reviewed by the National Science Teachers Association and is available in the following formats: Apple IIe, Apple IIGS, IBM, Macintosh, IBM Novell, and AppleShare. Accompanying the software is a teacher's manual that includes a user's guide for the software and explanations of the experiments, including objectives, additional data and definitions, and extension activities for students. Recommended for upper elementary/middle school students.

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Troll School and Library L.L.C.
100 Corporate Drive
Mahwah, NJ 07430
(201) 529-4000
Fax: (201) 529-1862

A publishing firm specializing in children's books.

Publishes educational materials for students from kindergarten through grade 8. Includes a complete line of science materials relating to life, earth and physical sciences. Some of the energy-related titles are *Electricity; Energy and Fuels; Wonders of Energy; World of Weather;* and *Discovering Electricity*. Science Thematic Units are also available for children from prekindergarten through grade 6. Materials may be purchased from the publisher. Free catalogs are available upon request.

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Union of Concerned Scientists
Two Brattle Square
Cambridge, MA 02238-9105
(617) 547-5552
Fax: (617) 864-9405
E-Mail: ucs@ucsusa.org
Web: http://www.ucsusa.org

An independent, nonprofit organization of scientists and other citizens concerned about the impacts of advanced technology on society.

Focuses on responsible stewardship of the environment. Materials include books and briefing papers on renewable

energy, transportation policy, global warming, nuclear power safety, sustainable agriculture, and arms control. Free brochures are available, such as *Solar Power, Energy on the Road, Nuclear Power, Renewable Energy and Developing Countries,* and *World Scientist Warning to Humanity*. Our newest book *Renewables Are Ready: People Creating Renewable Energy Solutions* describes how people across the country--from rural farm communities to large cities--have put renewable energy to work in their homes, schools, and businesses. Teachers can purchase a 100-page multidisciplinary guide to teaching renewable energy in grades 7 through 12, as well as a collection of eight posters on renewables and a renewable energy slide show. 129

University of California-Los Angeles
Graduate School of Education
405 Hilgard Avenue
Los Angeles, CA 90025
(213) 825-4321

A State-run, academic institution.

This project involves secondary school master science teachers from the Los Angeles area in the creation of two cross-curricular, multilevel modules that focus on environmental science. Collaboration involves UCLA, area community colleges, and middle school and high school faculty. National Science Foundation support for this project began in 1993; some materials are still under development. 130

University of Florida
Center for Economic Education
186 Norman Hall
Gainesville, FL 32611-2053
(352) 392-0971
Fax: (352) 392-7159
E-Mail: econ_ed@afn.org
Web: http://www.coe.ufl.edu/CEE/cee.html

A university center responsible for providing educational materials to teachers.

Provides curriculum guides for teachers. Available for a fee are the *Energy and Economics* (high school); *Resources and Energy* (grades 2 and 3); *and Resources and Energy* (middle school) curriculum guides designed to give students a greater understanding of the connections between energy and economics. Bulk orders of 100 or more copies can be purchased at a discount. 131

University of Illinois at Urbana-Champaign
School of Architecture–
Building Research Council (BRC)
1 East St. Mary's Road
Champaign, IL 61820
1-(800) 336-0616
Fax: (217) 244-2204
E-Mail: pmiebach@uiuc.edu
Web: http://intrados.arch.uiuc.edu/research/brc/index.html

A nonprofit information clearinghouse and research center.

Publishes 8-, 12-, and 16-page booklets on how to make homes comfortable, healthy, and energy efficient, which are appropriate for home owners and seniors in high school. BRC offers the following publications at a nominal fee: *Home Inspection*, which examines each home system–plumbing, electrical, etc., and provides a checklist for buying a home; *Lighting*, which focuses on task, security, and general lighting; *Energy Management*, which outlines practical management plans for summer and winter; *Insulating*, which focuses on how to know what type and how much insulation is needed.

Heating, which is about the various kinds of heating systems and how to select a system; *Selecting Windows*, which explains window options and energy savings by selecting wisely; and *Moisture Condensation*, which discusses how to keep moisture from making a home chilly and prone to water damage. *Energy Management* is available in Spanish. A free publications catalog is available upon request. A complete set of 27 booklets is available for instructors and home owners. Bulk rates are available. 132

University of Maryland-College Park
Physics and Astronomy Department
College Park, MD 20742
(301) 454-3311

A State-run, academic institution.

Teacher enhancement opportunities were designed for middle school teachers in acoustics, optics, electricity, and Newton's laws. Manuals provide detailed discussion of a series of experiments which can be performed with selected apparatuses. National Science Foundation support for this project began in 1991; some materials are still under development. 133

U.S. Consumer Information Center
Pueblo, CO 81009
(719) 948-4000
Fax: (719) 948-9724
E-Mail: Catalog.pueblo@gsa.gov
Web: http://www.pueblo.gsa.gov

Helps Federal agencies develop, promote, and distribute consumer information to the public through the *Consumer Information Catalog*.

Offers the free, quarterly *Consumer Information Catalog* containing listings of over 200 free and low cost Federal consumer publications on topics such as health, energy conservation, Federal benefits, money management, housing,

child care, employment, small business, education, food and nutrition, and more. A free catalog is available by writing to: Free Catalog, Pueblo, CO 81009.

Bulk copies are available to schools and nonprofit groups able to distribute 20 or more copies. 134

U.S. Department of Agriculture
Forest Service
Rocky Mountain Forest and Range Experiment Station
240 W. Prospect Street
Fort Collins, CO 80526
(970) 498-1500
(970) 498-1719 (publications distribution)
Fax: (970) 498-1660

Forest Service research is intended to serve society by developing and communicating the scientific information and technology needed to protect, manage, and use the natural resources of forests and rangelands.

Provides copies of technical publications on ecosystem component interactions, resource management and protection, resource interactions, and people's values and interactions with ecological systems. Available publications include: *Distribution of Abandoned and Inactive Mines on Forest Service Lands* and *Energy and Industries in National, Regional, and State Economies*. 135

U.S. Department of Commerce
National Oceanic & Atmospheric Administration (NOAA)
Office of Public Affairs
14th & Constitution Avenue, N.W.
Room 6013
Washington, DC 20235
(202) 482-6090
Web: http://www.noaa.gov

A Federal agency with programs to advance the Nation's science education goals by expanding and enhancing the scientific competence of all students, teachers, and the general public.

Provides free of charge to students, teachers, librarians, and the general public information about the earth's oceans and atmosphere including the topics of endangered marine mammals, severe and hazardous weather, NOAA

weather radio, coastal management, civilian satellites, and global warming. Information about NOAA's educational programs, like the Teacher at Sea, is also available from this office. **136**

U.S. Department of Education
ERIC Clearinghouse for Science, Mathematics, and Environmental Education
1929 Kenny Road
Columbus, OH 43210-1080
(614) 292-6717
1-(800) 276-0462
Fax: (614) 292-0263
E-Mail: ericse@osu.edu
Web: http://www.ericse.org

One of 16 ERIC clearinghouses, the ERIC Clearinghouse for Science, Mathematics, and Environmental Education (ERIC/CSMEE) develops, maintains, and makes accessible to the public the world's largest education-related database which includes over 850 items relating to energy education.

ERIC/CSMEE, sponsored by the Office of Educational Research and Improvement, U.S. Department of Education, has as its primary function the acquisition and dissemination of printed materials related to science, mathematics, and environmental education. The information is indexed and abstracted for inclusion in two monthly publications, *Resources in Education (RIE)* and *Current Index to Journals in Education (CIJE)*. *RIE* provides abstracts for a variety of educational materials; *CIJE* announces journal literature. In addition to acquiring and processing documents and journal articles, the ERIC/CSMEE staff produces digests and other documents. Digests are short publications (one page, front and back) on a single topic. Other publications include yearbooks, source books, reviews of research, instructional activity collections on broad topics, and collections of papers presented at national meetings. The Clearinghouse offers a variety of user services and

maintains a full ERIC microfiche collection, *RIE* and *CIJE* reference collection, and a library collection of materials related to the scope areas. The Clearinghouse also provides a variety of electronic services on the Internet. A Gopher server can be accessed at: gopher.ericse.ohio-state-edu and a World Wide Web server can be accessed at: http://www.ericse.org. 137

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
555 New Jersey Avenue, N.W.
Washington, DC 20208-5461
(202) 219-1556
1-(800) 424-1616
Fax: (202) 219-1321
E-Mail: library@inet.ed.gov
Web: http://www.ed.gov

Provides information about education research, statistics, publications, and data sets.

Publishes a series of *Helping Your Child* books for parents. Included is *Helping Your Child Learn Geography*, which helps children look at the world in which they live, the effects of the environment on the way in which towns have developed, and the effects humans have had on the environment that have made areas livable. Other series topics include: *Science, Math, History, Reading, Using the Library, Get Ready for School, Succeed in School, Responsible Behavior*, and *Being Healthy and Fit*. All are available for a nominal fee. To obtain ordering instructions for all of the *Helping Your Child* books, write to Helping Your Child List, OERI Media and Information Services, at the above address. Write to the above address to obtain the *OERI Bulletin*, a free quarterly listing of publications, programs, statistics, and grants. 138

U.S. Department of Energy
Argonne National Laboratory
Division of Educational Programs
9700 South Cass Avenue
Argonne, IL 60439-4845
(630) 252-4114
Fax: (630) 252-3193
E-Mail: bowen@dep.anl.gov
Web: http://www.dep.anl.gov

A DOE-funded multi-purpose national laboratory providing programs to promote science careers and improve science education.

Provides four continuing programs for kindergarten through grade 12 teachers as follows: (1) The Argonne Community of Teachers, a local organization of teachers who have participated in ANL programs in the past and who continue to work with the laboratory to improve science education for schools in the Chicago area. The group maintains a Web site: http://kiwi.dep.anl.gov/. Also on this site are curriculum for the Bill Kurtis New Explorers episode, "Atoms for Piece," which chronicles the development of reactors and nuclear energy. (2) Curriculum and video tapes for the PBS series "The New Explorers" have been developed by various museums and DOE laboratories across the Nation. The guides are designed to encourage students to consider science careers and to provide good science activities. The guides and videos are available for a fee through PMI Films, Inc. at 1-(800)-343-4312. (3) The Educational Networking Consortium is a training and internet access organization that attempts to train and connect Chicago area teachers to the internet using a collection of dial-in sites in collaboration with the Illinois State Board of Education. (4) NEWTON, The Science Teachers Bulletin Board, offers a place where teachers and students can discuss education and ask questions of practicing scientists. The bulletin board can be reached by telnet at newton.dep.anl.gov or by a web browser at http://kiwi.dep.anl.gov/newton/newtonpg.html. 139

U.S. Department of Energy
Biofuels Feedstock Development Program
Oak Ridge National Laboratory
P.O. Box 2008
Oak Ridge, TN 37831-6422
(423) 576-5132
Fax: (423) 576-8143
E-Mail: are@ornl.gov
Web: http://www.esd.ornl.gov/bfdp

A DOE-funded program that supports research, analysis, and communication activities to foster the development and adoption of alternative fuels.

Provides free information on biomass, specifically fast growing trees and grasses, for use as raw materials for conversion to transportation fuels and electricity. The information is in the form of fact sheets, reports, and bibliographies. A newsletter, *Energy Crops Forum*, is published periodically. In addition, a World Wide Web/Internet service, the Biofuels Information Network, contains full text of many of the reports, newsletters, and fact sheets and provides pointers to other places with related materials. **140**

U.S. Department of Energy
Bonneville Power Administration
Community Education Program-APPP
P.O. Box 3621
Portland, OR 97208-3621
(503) 230-3709
Fax: (503) 230-5884
E-Mail: jhmcnamara@bpa.gov
Web: http://www.bpa.gov

Bonneville Power Administration (BPA) is both an electric utility and a Federal agency within DOE. Established in 1937, BPA markets electric power from Federal dams and other energy resources in the Pacific Northwest. BPA employs approximately 3,000 persons in Idaho, Montana, Oregon, and Washington. The majority work in the Portland-Vancouver metropolitan area headquarters and control center. BPA works with several business, school, and government agency partnerships. Many employees volunteer each year for various programs.

Participates in a variety of education programs in the BPA four-State service area. Various programs, which are available in some areas for teachers and students from primary school through high school, include math and science enhancements, hands-on learning, worksite mentoring and apprenticeships, competitions, environmental education, tutoring, and others. Educational materials loaned or given free of charge to teachers in BPA's service territory (Oregon, Washington, Idaho and Western Montana) include

curricula, activity, and storybooks; posters; videotapes; and exhibits. Topics covered are primarily electricity, energy conservation, and fish and wildlife. **141**

U.S. Department of Energy
Carbon Dioxide Information
Analysis Center (CDIAC)
MS-6335, Building 1000
Oak Ridge National Laboratory
P.O. Box 2008
Oak Ridge, TN 37831-6335
(423) 574-0390
Fax: (423) 574-2232
E-Mail: cdiac@ornl.gov
Web: http://cdiac.esd.ornl.gov/

A DOE-funded program that provides information support to the international research, policy, and education communities for evaluation of issues related to climate change.

Provides reports and fact sheets, including a newsletter, *CDIAC Communications*, which describes CDIAC and DOE initiatives in global change research. *Trends: A Compendium of Data on Global Change*, a quick source of frequently requested data, is also available. *Global Change Acronyms and Abbreviations* is a new publication providing a comprehensive listing of acronyms and abbreviations used in global change research, policy, and education settings. *Glossary: Carbon Dioxide and Climate* contains a glossary of CO_2-related terms and tables of information related to CO_2 and climate. These materials are suitable for middle school and high school students. All are free. Four-page *DOE Research Summary* briefs are available, as well as a PC model on global energy-CO_2 emissions. The *IEA/ORAU Long-Term Global Energy Economics Model with CO_2 and CH_4 Emissions* is a PC-version of a computer model package, suitable for high school and college students, with a number of variables to interactively produce CO_2 and CH_4 emission scenarios for 1975 through 2100. **142**

U.S. Department of Energy
Clean Cities Hotline
P.O. Box 12316
Arlington, VA 22209
1-(800) CCITIES or (224-8437)
(703) 528-1222
Fax: (703) 528-1953
E-Mail: ccities@nrel.gov
Web: http://www.ccities.doe.gov

The Clean Cities Hotline, sponsored by DOE, provides information on the Clean Cities Program--a voluntary and cooperative effort to promote alternative-fuel vehicles.

Provides implementation and technical information on the DOE's Clean Cities program. Helps communities convert to alternative-fuel vehicles through coordination planning. Also provides general information on the Clean Cities Program, lists of involved cities and participants, as well as technical and regulatory information of use to Clean Cities, such as funding for alternative-fuel vehicles and information on the Clean Air Act and Energy Policy Act. Remains in direct contact with the Clean Cities Program Directors, DOE regional offices, and involved Clean Cities. The Hotline is available between 9 a.m. and 6 p.m., eastern standard time. The toll-free 800 number is available to callers in the United States only. 143

U.S. Department of Energy
Energy Efficiency and Renewable
Energy Clearinghouse (EREC)
P.O. Box 3048
Merrifield, VA 22116
1-(800) DOE-EREC or (363-3732)
1-(800) 273-2955 (bulletin board service)
Fax: (703) 893-0400
E-Mail: doe.erec@nciinc.com

A DOE-funded energy information service responding to public inquiries on the use of renewable energy and energy conservation.

Provides information on renewable energy and energy-efficient technologies to consumers, teachers, and students. Maintains lists of organizations that will supply educators with energy-related booklets, audio-visual materials, software, bibliographies, project contacts, kits, and equipment. Publications suitable for primary school and secondary school students are available. 97

Teachers and librarians may request activity lists, bibliographies, and background materials. Publications are free. **144**

U. S. Department of Energy
Federal Energy Technology Center
FETC-MGN
P.O. Box 880
3610 Collins Ferry Road
Morgantown, WV 26507-0880
(304) 285-4473
Fax: (304) 285-4292
E-Mail: DBOGGS@METC.DOE.GOV

A Federal fossil energy research facility.

FETC-MGN hosts the West Virginia Regional Science Bowl. The bowl is academically competitive among 16 teams of 5 students from across the State. The winner of the competition progresses on to the national competition. Various teacher workshops are held to assist the local school system and teachers in evaluating approaches and curriculum materials for "hands on" teaching of scientific concepts and methods. FETC-MGN assists with the development of "science and energy modules" for use in school visits or Center tours. Area Girl Scouts host guest speakers from the Center to demonstrate hands on activities during summer camps. **145**

U. S. Department of Energy
Federal Energy Technology Center
FETC-PGH
P.O. Box 10940
626 Cochrans Mill Road
Pittsburgh, PA 15236-0940
(412) 892-4826
Fax: (412) 892-4158
E-Mail: GRAY@PETC.DOE.GOV

A Federal fossil energy research facility.

FETC-PGH provides free materials for grade 3 through 5 that include extensive activities and teacher lesson plans. The materials were developed as a joint

project between Pittsburgh scientists and teachers in the Elementary Teacher Research Internship Program. The materials include a booklet entitled *Coal: Energy for Home and Community,"* laboratory activities, support information, discussion ideas, and overhead masters for viewgraphs on coal as well as solar and wind energy sources.
146

U.S. Department of Energy
Los Alamos National Laboratory
Science Education Program Office
MS F671
Los Alamos, NM 87545
(505) 667-8680
Fax: (505) 665-6871
E-Mail: dgill@lanl.gov
Web: http://www.education.lanl.gov

A DOE-funded national laboratory.

Offers 25 different educational programs for students, teachers and the public, for elementary through university levels. They include teacher enhancement workshops, student participation programs, technology integration, and curriculum development, in areas of science, engineering, math and technology. Some programs are national in scope, while others are regional or local. Each of the programs is described at the above Web site address.

Products available include: *Science at Home*, a book of science experimental activities for elementary and middle school students and parents to do together using commonly available materials; Risks, Rewards and Responsibilities, a curriculum module for high school teachers that uses the subject of radiation to look at the broader issue of risk assessment; and Hydrogen and the Materials of a Sustainable Energy

Future, a notebook of experiments and demonstrations for teachers that were presented at the National Educator's Workshop: UPDATE 96. Other materials may be available from time to time, and are announced on the Web site. **147**

U.S. Department of Energy
National Alternative Fuels Hotline
P.O. Box 12316
Arlington, VA 22209
1-(800) 423-1DOE or (423-1363)
(703) 528-3500
Fax: (703) 528-1953
E-Mail: hotline@afdc.nrel.gov
Web: http://www.AFDC.DOE.GOV

The National Alternative Fuels Hotline (NAFH) is sponsored by DOE to assist the general public and interested organizations in improving their understanding about alternative transportation fuels.

Provides information on vehicle conversion technology, refueling station locations, and Federal alternative fuel programs. Free publications and data are available on alternative fuel technology, legislative and regulatory changes, and other issues concerning the alternative transportation fuel industry. In addition, NAFH works directly with the National Renewable Energy Laboratory's Alternative Fuel Data Center (AFDC). Data on vehicle emissions, performance, fuel economy, maintenance, and more are available through the AFDC. For more on alternative fuels and the AFDC, call NAFH's toll free number. **148**

U.S. Department of Energy
National Energy Information Center (NEIC), EI-30
Energy Information Administration
1000 Independence Avenue, S.W.
Room 1F-048
Washington, DC 20585
(202) 586-8800
Fax: (202) 586-0727
E-Mail: infoctr@eia.doe.gov
Web: http://www.eia.doe.gov

NEIC is the information dissemination service for DOE's Energy Information Administration, which is responsible for the collection, analysis, and distribution of energy statistics.

Available free of charge is an "Energy INFOcard," a quick-reference card providing the most recent annual domestic and international energy data; *Energy Education Resources: Kindergarten through 12th Grade*; and *Energy Information Sheets*, a booklet comprising one-page capsules on such energy topics as petroleum, natural gas, coal, and renewable energy. All three products are also available on EIA's award-winning World Wide Web site, which also features hundreds of links to other energy-related sites, an energy quiz, an interactive query system that allows you to tap directly into selected EIA data, an energy calendar listing events and activities, and EIA publications and data bases covering the various energy sources. **149**

U.S. Department of Energy
National Low Level Waste Management Program, EM-35/TREV
Office of Environmental Management
19901 Germantown Road
Germantown, MD 20874-1290
(301) 903-7177
Fax: (301) 903-7451

A Federal program providing both general and special technical assistance to States and regions to establish an effective nationwide system for the disposal of commercial low level radioactive waste.

Provides general information on low level radioactive waste management through short fact sheets, a booklet with answers to frequently asked questions on low level radioactive waste disposal, and brochures on what constitutes commercial low level waste; concepts for disposal of low level waste; and low level radioactive waste basics. **150**

U.S. Department of Energy
National Renewable Energy Laboratory
Education Programs
1617 Cole Boulevard 17/4
Golden, CO 80401
(303) 275-3044
Fax: (303) 275-3076
Web: http://www.nrel.gov

A DOE-funded national laboratory that promotes renewable energy and energy efficiency sources and uses.

Maintains a library of educational materials on renewable energy for kindergarten through university level classes and provides informational materials on renewable energy to students and teachers at all levels. Also manages and/or hosts several renewable energy and science educational programs such as the Junior Solar Sprint, a hands-on science program for students in grades 6 through 8 to design and build a model solar car. 151

U.S. Department of Energy
Office of Civilian Radioactive
Waste Management
Planning and Administration Division
RW-54
1000 Independence Avenue, S.W.
Room GF-277
Washington, DC 20585
(202) 488-6720
1-(800) 225-NWPA
Fax: (202) 488-6721
Web: http://www.rw.doe.gov

A Federal program established to manage and dispose of the Nation's spent nuclear fuel and high level radioactive waste.

Furnishes a curriculum, *Science, Society, and America's Nuclear Waste*, to educators free of charge. The four-unit curriculum, designed for use in grades 8 through 12, contains materials for both students and teachers. Student materials include readings, review exercises, and activities. For teachers, supplemental teaching aids include videotapes, computer software, and viewgraphs. Also available is general information on the

Civilian Radioactive Waste Management Program, including fact sheets, brochures, videotapes, and a semi-annual newsletter. All publications and videotapes are free upon request. 152

U.S. Department of Energy
Office of Fossil Energy
Communications, FE-5
1000 Independence Avenue, S.W.
Room 4G-085
Washington, DC 20585
(202) 586-6503
Web: http://WWW.FE.DOE.GOV

A Federal Office providing technical and public education-related information on coal, oil, and natural gas technologies, and the Nation's petroleum reserves.

Offers *Dinosaurs and Power Plants*, a three-document teaching set that relates the story of mining and drilling for coal, gas, and oil; environmental concerns; and modes of transportation. Included are two teaching guides and a booklet for students. All are free. 153

U.S. Department of Energy
Office of Nuclear Energy, Science and Technology
Office of Planning and Analysis, NE-20
Washington, DC 20585
(301) 903-6590
Fax: (301) 903-1637

Public Information Office for the Office of Nuclear Energy, Science and Technology. Responds to public inquiries about DOE's civilian nuclear energy program.

Offers energy educational materials, including historical and current factual data on nuclear energy. Pamphlets discuss such issues as the nuclear fuel cycle and civilian uses of nuclear energy. Available publications include: *The History of Nuclear Energy*, *Atoms to Electricity*, *The Harnessed Atom*, and several others. Also provides a booklet listing nuclear power plants, with operating data. All publications are free. 154

U.S. Department of Energy
Office of Scientific and Technical Information
P.O. Box 62
Oak Ridge, TN 37831
(423) 576-8401
Fax: (423) 576-2865
E-Mail: usertalk@adonis.osti.gov

The Office of Scientific and Technical Information (OSTI) is responsible for the management of DOE's scientific and technical information. OSTI works with DOE's program offices in making energy-related information available to the public.

Provides pamphlets on various energy-related subjects as available and as directed by the program offices. Many publications are free. Also provides electronic access to departmental information through the DOE Home Page at the World Wide Web Server URL http://www.doe.gov on the Internet. This server can also be reached by dial-up through a modem at (423) 241-3901. **155**

U.S. Department of Energy
Southwestern Power Administration
P.O. Box 1619
Tulsa, OK 74101
(918) 595-6600
Fax: (918) 595-6656

A DOE power marketing administration serving the six-State area of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas.

Provides tutoring and special project assistance to a local magnet middle school. Also provides a limited number of educational/informational publications, designed for elementary school-age children, on safe play around electrical sources. **156**

U.S. Department of Energy
Western Area Power Administration
P.O. Box 3402
Golden, CO 80401
(303) 275-1739
Fax: (303) 275-1717
E-Mail: buntin@wapa.gov

A DOE power marketing administration encompassing all or parts of 15 western States.

Provides contact points with WAPA's customers regarding on-going energy educational efforts on conservation and renewable energy for students from kindergarten through grade 12. For information, call the Energy Services Manager in any of the following cities: Billings, Montana, (406) 247-7392; Loveland, Colorado, (970) 490-7227; Phoenix, Arizona, (602) 352-2655; Sacramento, California, (916) 353-4435; and Salt Lake City, Utah, (801) 524-5495, or the Division of Energy Services in Golden, Colorado. 157

U.S. Department of the Interior
Bureau of Land Management (BLM)
1849 C Street, N.W.
Washington, DC 20240
(202) 452-5128 (Public Affairs)
(202)452-0378 (Minerals Outreach Coordinator)
Fax: (202) 452-0399
Web: http://www.blm.gov/

A regulatory agency responsible for the management of a wide variety of resources on public lands. These resources include wildlife habitat, recreational values, cultural and historic sites, scenic, and wilderness areas as well as more than 60 types of minerals produced from public lands.

Provides materials on energy and mineral resources found on Government-owned land. BLM has an active program for presentation of energy and minerals sciences, especially as they relate to the public lands. Exhibits may be arranged for professional functions or fairs. Presentations at local schools or youth gatherings can be arranged through any BLM office or through the Minerals

Outreach Coordinator in Washington, DC. Demonstration areas showing preservation and reclamation techniques may be used as field trips for students. Also offers several videos on preservation of ecosystems and reclamation. Pamphlets, brochures, maps, fact sheets, environmental studies, and statistical summaries are available free upon request or for a minimal charge. BLM is also active in the preservation of old mining towns, and tours of these "ghost towns" may be arranged. 158

U.S. Department of the Interior
Minerals Management Service (MMS)
1849 C Street, N.W.
Washington, DC 20240
(703) 787-1080
Fax: (703) 787-1010 or (703) 787-1186
Web: http://www.mms.gov

Provides informational materials on gas, oil, mineral, and environmental resources in the ocean. Available materials include color photo posters, brochures, fact sheets, statistical summaries, technical reports, newsletters, environmental studies, and professional papers. Most material is free upon request, but quantities may be limited. MMS has an extensive color slide collection, and arrangements may be made for loans or duplications at cost. Most information is suitable for upper grade levels.

MMS is a regulatory agency responsible for balancing energy and mineral resource development with protection of environmental resources on the U.S. Outer Continental Shelf.

Offices in Washington, DC; New Orleans, Louisiana; Camarillo, California; and Anchorage, Alaska, can arrange for presentations at local schools on the work conducted at MMS and on geology, environmental science, engineering, resource management, international activities, and related topics. Several video programs are available on loan, including an interactive video. MMS professionals have worked with schools to develop their energy and environmental resource curricula. Call or write for further information and referral or to ask for a catalog of publications. 159

U.S. Environmental Protection Agency (EPA)
Public Information Center, 3404
401 M Street, S.W.
Washington, DC 20460
(202) 260-2080
Fax: (202) 260-6257
E-Mail: public-access@epamail.epa.gov

Public Information Center for EPA. Responds to public inquiries about environmental issues and EPA programs. Also serves as the main referral point for the Agency.

Provides free material on drinking water, air quality, pesticides, radon, indoor air, Superfund, wetlands, and other environmental topics. 160

Videodiscovery, Inc.
1700 Westlake Avenue N. , Suite 600
Seattle, WA 98109-3012
1-(800) 548-3472
(206) 285-5400
Fax: (206) 285-9245
Web: http://www.videodiscovery.com

An educational software publisher.

Developer and publisher of multimedia programs for kindergarten through college-level science education. Specifically, the company publishes

interactive science videodiscs, CD-ROMs, and computer software, such as *STS Science Forums; Understanding Earth; Chemistry at Work; Science Sleuths;* and *Physics at Work.* The company is dedicated to improving science instruction through the advancement of educational technologies. A free catalog of products is available upon request. **161**

Water Environment Federation
601 Wythe Street
Alexandria, VA 22314-1994
(703) 684-2400
1-(800) 666-0206
Fax: (703) 684-2492
E-Mail: lloken@wef.org
Web: http://www.wef.org

A not-for-profit technical and educational group of water quality experts with more than 41,000 members located in all 50 States and around the world.

Publishes *The Water Sourcebook*, with over 60 hands-on classroom activities; the *Water Environment Curriculum Program*, including units on wastewater (also available in Spanish), surface water, groundwater (also available in Spanish) and water conservation. Many of the water quality experts act as classroom resources through the WEF Adopt-A-School program. Local members choose to "adopt" schools by providing guest speakers, presentations, and tours of water treatment plants, plus videos and other special resources. For more information on these and all of WEF's public education materials and brochures, call the toll free number. **162**

Waverly Light and Power
1002 Adams Parkway
P.O. Box 329
Waverly, IA 50677
(319) 352-6251
Fax: (319) 352-6254

A municipal utility serving electric needs of the community.

Provides educational services free to educators within its service territory. Services include generating plant tours, classroom presentations, and purchased reference materials for kindergarten through grade 12. **163**

Westinghouse Electric Corporation
Energy Systems
Communications Department
P.O. Box 355, Bay 216 E
Pittsburgh, PA 15230-0355
(412) 374-6803

A company dedicated to providing high quality products, services, technology, systems, and management in nuclear energy, as well as advanced energy and process control systems.

Provides energy-related materials to all who are interested, especially to teachers and to students who will make our energy decisions in the future. A few copies of the booklets are available free of charge. However, for larger quantities, there is a fee. Materials available are: a simulated uranium fuel pellet; *Electricity from Nuclear Energy; Nuclear Energy Glossary; Questions Kids Ask About Energy, Radiation Booklet;* and Component Illustrations (color prints). For more information, you may contact the Communications Department of the Energy Systems Business Unit. **164**

Wisconsin Public Service Corp.
600 N. Adams
P.O. Box 19002
Green Bay, WI 54307-9002
(414) 433-1433
Fax: (414) 433-5741
Web: http://www.wpsr.com

Provides a wide array of free energy-related videos, presentations, publications, and teaching kits to educators kindergarten through grade 12, students and community groups. Our materials emphasize safety, energy management, environment, and renewable energy. Other services include tours, scholarships for teachers and students, school-to-work opportunities, speakers bureau, teacher workshops, and electric car demonstrations. Write or call to receive a complete list of our education programs. 165

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